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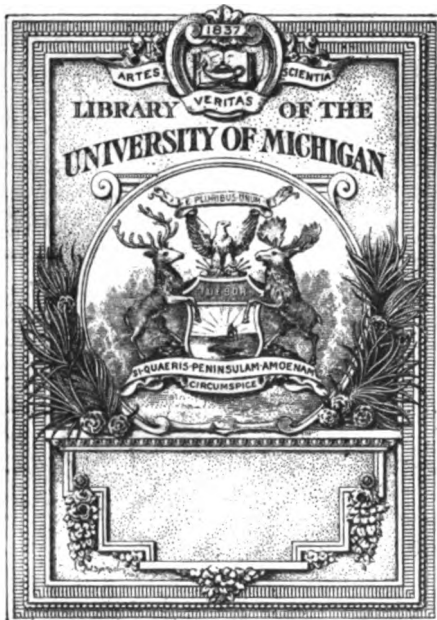
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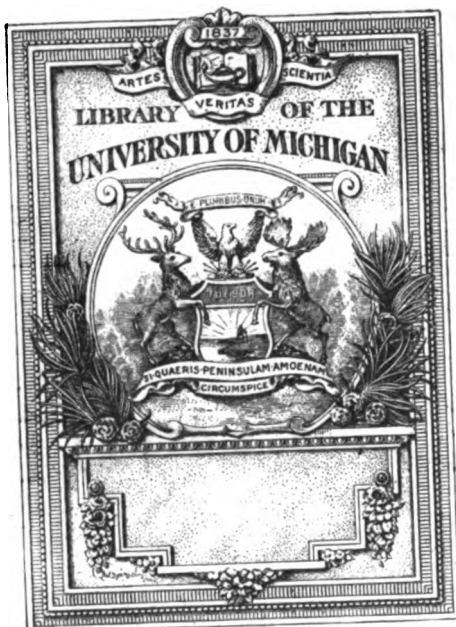
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Sixty-seventh Annual Report

OF THE

Ohio State Board of Agriculture

**WITH AN ABSTRACT OF
THE PROCEEDINGS OF**

The County Agricultural Societies

For the Year 1912

TO THE

General Assembly of the State of Ohio



**Springfield, Ohio :
The Springfield Publishing Company,
State Printers.
1913.
Bound at the State Bindery.**

Ohio State Board of Agriculture

1912

Officers

JACOB DEAN, President.

E. L. LYBARGER, Vice-President.

L. W. KILGORE, Treasurer.

A. P. SANDLES, Secretary, Columbus.

J. W. FLEMING, Assistant Secretary, Columbus.

Members

	Term Expires.
P. G. EWART, East Akron, Summit County.....	January, 1913
E. L. LYBARGER, Warsaw, Coshocton County.....	January, 1913
J. F. CROSS, Washington C. H., Fayette County.....	January, 1914
J. A. BEIDLER.....	January, 1914
T. E. CROMLEY, Ashville, Pickaway County.....	January, 1915
L. W. KILGORE, London, Madison County.....	January, 1915
C. W. McFARLAND, Mt. Gilead, Morrow County.....	January, 1916
W. G. FARNSWORTH, Waterville, Lucas County.....	January, 1916
C. H. GANSON, Urbana, Champaign County.....	January, 1917
JACOB DEAN, Chester, Meigs County.....	January, 1917

Farmers' Institute Committee

E. L. LYBARGER,
J. F. CROSS,

P. G. EWART,
W. G. FARNSWORTH.

Auditing Committee

L. W. KILGORE,

J. A. BEIDLER,

C. W. McFARLAND.

Grounds and Buildings Committee

JACOB DEAN,

C. H. GANSON.

T. E. CROMLEY,

282882

Ohio State Board of Agriculture

1913

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E. L. LYBARGER, President.

P. G. EWART, Vice-President.

L. W. KILGORE, Treasurer.

A. P. SANDLES, Secretary, Columbus.

J. W. FLEMING, Assistant Secretary, Columbus.

Members

	Term Expires.
P. G. EWART, East Akron, Summit County.....	January, 1913
E. L. LYBARGER, Warsaw, Coshocton County.....	January, 1913
JACOB B. PERKINS, Cleveland, Cuyahoga County.....	January, 1914
J. F. CROSS, Washington C. H., Fayette County.....	January, 1914
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L. W. KILGORE, London, Madison County.....	January, 1915
C. W. McFARLAND, Mt. Gilead, Morrow County.....	January, 1916
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JACOB DEAN, Chester, Meigs County.....	January, 1917

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L. W. KILGORE,

C. W. McFARLAND.

Farmers' Institute Committee

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E. L. LYBARGER,

W. G. FARNSWORTH,

J. F. CROSS.

Grounds and Buildings Committee

C. H. GANSON,

T. E. CROMLEY,

JACOB DEAN.

**LIST OF MEMBERS OF THE OHIO STATE BOARD OF AGRICULTURE
FROM THE ORGANIZATION OF THE BOARD TO DATE.**

(NOTE—The act creating the State Board of Agriculture, passed in 1846, provided for fifty-three members and named them. The act was amended in 1847, reducing the number of members to ten. Five members were elected each year for a term of two years until 1898, when the act was so amended as to provide for the election of two members each year for a term of five years.)

Names.	Years of Service, Inclusive.	Residence.
John B. Bayless.....	1846	Jefferson County.
Henry C. Brish.....	1846	Seneca County.
Frederick Bonner.....	1846	Greene County.
Joseph Burns.....	1846	Coshocton County.
John Chaney.....	1846	Fairfield County.
G. W. Cowden.....	1846	Trumbull County.
Absalom Dun.....	1846	Butler County.
John Eckles.....	1846	Hancock County.
Elias Florence.....	1846	Pickaway County.
John Fuller.....	1846	Erie County.
Geo. W. Gibbons.....	1846	Muskingum County.
William Gill.....	1846	Pickaway County.
H. N. Gillett.....	1846	Lawrence County.
L. C. Goble.....	1846	Putnam County.
David Gregory.....	1846	Delaware County.
Anson Howard.....	1846	Champaign County.
John Johnson.....	1846	Miami County.
Aaron Johnson.....	1846	Perry County.
Greenbury Keen.....	1846	Portage County.
Billius Kirtland.....	1846	Mahoning County.
Newton Larsh.....	1846	Preble County.
Liba Lindley.....	1846	Athens County.
Jas. Loudon.....	1846	Brown County.
John McElderry.....	1846	Tuscarawas County.
Wm. McFadden.....	1846	Harrison County.
Beatty McFarland.....	1846	Jefferson County.
John Martin.....	1846	Columbiana County.
Isaac Moore.....	1846	Lake County.
Gilman C. Mudgett.....	1846	Paulding County.
Samuel Myers.....	1846	Crawford County.
Isaac Neiswanger.....	1846	Belmont County.
Simon Perkins.....	1846	Summit County.
Henry Protzman.....	1846	Montgomery County.
W. R. Putman, Jr.....	1846	Washington County.
Felix Renick.....	1846	Ross County.
Jas. L. Reynolds.....	1846	Stark County.
Benj. Ruggles.....	1846	Belmont County.
Sam'l Spangler.....	1846	Fairfield County.
David Stevens.....	1846	Richland County.
Abraham Studdebaker.....	1846	Darke County.
Dowty Utter.....	1846	Clermont County.
John I. Vanmeter.....	1846	Pike County.
Richard Warner.....	1846	Medina County.
Jesse Wilson.....	1846	Shelby County.
J. M. Millikin.....	1846	Hamilton.
J. T. Pugsley.....	1846	Convenience.
Allen Trimble.....	1846-51	Hillsboro.
M. L. Sullivant.....	1846-53	Columbus.
Sam'l Medary.....	1846-53	Columbus.
Darius Lapham.....	1846-50	Cincinnati.

MEMBERS OF THE STATE BOARD OF AGRICULTURE—Continued.

Names.	Years of Service, Inclusive.	Residence.
Arthur Watts.....	1846-52	Chillicothe.
J. P. Kirtland.....	1846-48	Cleveland.
A. F. Strickle.....	1846-49	Wilmington.
M. B. Bateham.....	1847-51	Columbus.
John Coddling.....	1847-49	Granger.
C. Springer.....	1848-52	Meadow Farm.
J. M. Edwards.....	1848-52	Canfield.
J. G. Gest.....	1848-54	Spring Valley.
F. R. Elliott.....	1849-51	Cleveland.
J. T. Pugsley.....	1850-51	Convenience.
S. Halloway.....	1850-51	St. Clairsville.
William Case.....	1852-53	Cleveland.
Philo Adams.....	1852-53	Huron.
R. W. Musgrave.....	1852-57	Suphur Springs.
R. W. Steele.....	1853-56	Dayton.
William H. Ladd.....	1853-56	Richmond.
D. McIntosh.....	1853-54	Shalersville.
J. T. Worthington.....	1853-56	Chillicothe.
Joseph Sullivan.....	1854-55	Columbus.
John K. Greene.....	1854-57	Cincinnati.
James L. Cox.....	1854-55	Zanesville.
B. Stedman.....	1854-57	Cleveland.
Alexander Waddle.....	1855-60	South Charleston.
Abel Krum.....	1855-58	Cherry Valley.
Lucien Buttles.....	1856-59	Columbus.
G. W. Baker.....	1856-57	Marietta.
John M. Milliken.....	1857-62	Hamilton.
Luther Smith.....	1857-58	West Liberty.
Thomas S. Webb.....	1857-58	Massillon.
Norton S. Townshend.....	1858-63	Avon.
L. Q. Rawson.....	1858-59	Fremont.
James M. Trimble.....	1858-61	Hillsboro.
John Reber.....	1858-61	Lancaster.
D. E. Gardner.....	1859-64	Toledo.
William Dewitt.....	1859-64	Cleveland.
C. W. Pctwin.....	1859-62	Zanesville.
T. C. Jones.....	1860-67	Delaware.
Henry B. Perkins.....	1860-63	Warren.
David Taylor.....	1861-66	Columbus.
Jacob Egbert.....	1862-63	Lebanon.
Nelson J. Turrey.....	1862-69	Circleville.
D. McMillan.....	1863-70	Xenia.
W. R. Putnam.....	1863-64	Marietta.
William F. Greer.....	1864-67	Painesville.
James Fullington.....	1864-69	Irwir Station.
William B. McClung.....	1864-71	Troy.
James W. Ross.....	1865-70	Perrysburg.
R. R. Donnelly.....	1865-68	Wooster.
James Buckingham.....	1865-72	Zanesville.
J. Park Alexander.....	1867-70	Akron.
Norton S. Townshend.....	1868-69	Avon.
William Lang.....	1868-71	Tiffin.
D. C. Richmond.....	1869-74	Sandusky.
R. P. Cannon.....	1870-75	Aurora.
James B. Jamison.....	1870-77	Cadiz.
L. G. Delano.....	1870-75	Chillicothe.
L. B. Sprague.....	1871-76	Springfield.
Simpson Harmount.....	1871-76	New Philadelphia.
John A. Warder.....	1871-76	Cleves.

MEMBERS OF THE STATE BOARD OF AGRICULTURE—Continued.

Names.	Years of Service. Inclusive.	Residence.
W. S. Hickox.....	1872-73	Mansfield.
B. W. Carlisle.....	1872-79	Hooker's Station.
Justus C. Stephens.....	1873-74	Kenton.
John M. Pugh.....	1874-76	Columbus.
L. B. Wang.....	1875-80	Newark.
Russell C. Thompson.....	1875-76	Sylvania.
Leo Weitz.....	1876-83	Wilmington.
D. L. Pope.....	1876-81	Welshfield.
Charles Smith.....	1877-80	Marion.
E. T. Stickney.....	1877-78	Republic.
A. E. Stone.....	1877-78	Gallipolis.
Peter Murphy.....	1877-80	Hughes' Station.
W. N. Cowden.....	1878-83	Quaker City.
R. Baker.....	1879-82	Elyria.
Arvine C. Wales.....	1879-82	Masillon.
R. H. Hyman.....	1880-81	Portsmouth.
O. P. Chaney.....	1880-82	Canal Winchester.
C. D. Bailey.....	1881-88	Gallipolis.
J. C. Levering.....	1881-86	Levering.
William S. Foster.....	1881-88	Urbana.
L. B. Harris.....	1882-87	Upper Sandusky.
J. H. Brigham.....	1882-89	Delta.
L. N. Bonham.....	1883-86	Oxford.
H. Talcott.....	1883-87	Jefferson.
N. A. Sims.....	1883-85	Columbus.
T. P. Shields.....	1884-87	Watkins.
John Pow.....	1884-89	Salem.
S. H. Hurst.....	1884-89	Chillicothe.
J. J. Sullivan.....	1887-88	Millersburg.
Joseph H. Terrell.....	1887-88	New Vienna.
J. G. Russell.....	1887-90	Mt. Gilead.
H. G. Tryon.....	1888-91	Willoughby.
J. M. Black.....	1888-91	Hanover (Fairmount, W. Va.)
A. H. King.....	1889-96	Marion.
H. S. Grimes.....	1889-90	Portsmouth.
A. J. Clark.....	1889-98	Cambridge.
W. W. Miller.....	1889-94	Castalia.
J. W. Pollock.....	1890-93	Cedarville.
N. Ohmer.....	1890-95	Dayton.
L. G. Ely.....	1890-91	West Unity.
E. L. Hinman.....	1890-93	Columbus.
J. C. Bower.....	1891-98	Athens (Groveport.)
George Lewis.....	1891-94	Van Wert.
Chester Bordwell.....	1892-93	Batavia.
F. A. Derthick.....	1892-95	Mantua.
J. T. Robinson.....	1894-97	Rockaway.
G. Liggett.....	1894-1901	Watkins.
J. N. Pringle.....	1894-95	Cardington.
E. C. Ellis.....	1895-98	Crestview.
Chester Bordwell.....	1895-1901	Batavia.
L. G. Ely.....	1896-1900	Fayette (West Unity)
H. S. Grimes.....	1896-1900	Portsmouth.
Albert Hale.....	1896-99	Mogadore.
J. S. Stuckey.....	1897-1903	Van Wert.
S. H. Ellis.....	1898-99	Waynesville.
D. J. Green.....	1899-1902	Renrock.
B. P. Baldwin.....	1899-1903	Tiger.
Samuel Taylor.....	1899-1907	Grove City.

INDEX

A

	PAGE.
Abstracts From Reports of County Agricultural Societies for 1912.....	230-263
Agricultural Statistics	120-187
Agricultural Statistics	613-616
Ammonia, Sources of.....	410-415
Ammonia or Nitrogen, by E. E. Somermeier.....	459-463
Analysis of Commercial Fertilizers, by N. W. Lord.....	453-459
Average Prices of Other Farm Products Than Wheat and Corn in Ohio from 1855 to 1912.....	119

B

Barley, Comparative Table for Ten Years.....	190-191
Best Fertilizer is the Cheapest, The.....	436-437
Boys' Acre-of-Corn Contest, Report of, 1912.....	843-872
Broom Corn, Comparative Table for Ten Years.....	214-215
Buckwheat, Comparative Table for Ten Years.....	208-209
Bulletin of Awards, Ohio State Fair, 1912.....	265-388

C

Cattle, Number in Ohio for Ten Years.....	222-223
Cereal Milling Offals, by S. K. Johnson.....	651-656
Classification of Feeding Stuffs.....	665
Clover, Comparative Table for Ten Years.....	200-201
Clover Seed, Comparative Table for Ten Years.....	202-203
Compounding of a Fertilizer, The.....	432-436
Composition of Leading Farm Products.....	666-668
Composition of Some Materials Used in the Manufacture of Fertilizers.....	466
Commercial Fertilizers, Official Report on.....	407-620
Commercial Fertilizers Licensed, But Not Analyzed.....	600-609
Condition of Crops and Area of Oats, May 1, 1912.....	60-69
Condition of Crops, December 1, 1912.....	104-113

	PAGE
Condition of Crops, November 1, 1912.....	90-99
Condition of Crops, October, 1912.....	80-89
Condition of Wheat and Distribution of Live Stock, March, 1912.....	51-59
Corn, Comparative Table for Ten Years.....	196-197
Cost of Home Mixing of Fertilizer, The.....	436
Cottonseed Meals and Their Manufacture, by Dr. R. E. Stallings.....	648-650
Crop and Live Stock Statistics.....	50-229
Crops and Live Stock, July, 1912.....	70-79

D

Description of Elements used in the Manufacture of Fertilizer.....	465
Description of Products Used for Feed Stuffs.....	629-633
Division of Nursery and Orchard Inspection, Eleventh Annual Report of the Chief Inspector, 1912.....	767-815

E

Economical Feed Rations for Dairy Cows, by Prof. Oscar Erf.....	656-659
Editorials	873-876

F

Farmers' Institutes, Twenty-Second Annual Report of, 1911-1912.....	731-744
Farmers' Institutes, Twenty-Third Annual Report of, 1912-1913.....	745-765
Feed for Fattening Steers, by Prof. C. S. Plumb.....	650-651
Feed Stuffs Definitions.....	627-629
Feed Stuffs Inspection and Analysis.....	623-626
Feed Stuffs Licensed, but not Analyzed.....	718-719
Feed Stuffs, Official Report on.....	621-730
Feed Stuffs, Tabulated Analyses for the Year Ending December 31, 1912.....	669-717
Feeding Standards, by H. A. Weber.....	720-728
Fertilizing the Corn Crop.....	441-449
Fertilizer Inspection and Analysis.....	409-410
Fertilizing Problems, by Alfred Vivian.....	426-429
Field Experiments with Fertilizers, by Chas. E. Thorne.....	439-441
Filler or Make-Weight Materials, by E. E. Somermeier.....	463-465
Financial Statement of Feed Stuffs Inspection Ending December 31, 1912....	717
Financial Statement of Fertilizer Inspection Ending December 31, 1912.....	610
Flax, Comparative Table for Ten Years.....	212-213
Flaxseed, Comparative Table for Ten Years.....	210-211

H

Hogs, Number in Ohio for Ten Years.....	228-229
Home-Mixing of Fertilizers, The, by Chas. E. Thorne.....	429-432
Horses, Number in Ohio for Ten Years.....	220-221

I

	PAGE.
Important Questions and Answers Relative to the Use of Manures and Fertilizers, by Chas. E. Thorne.....	419-425
Important Questions and Answers Relative to the Use of Feed Stuffs, by H. A. Weber.....	635-638
Index to Exhibitors, Ohio State Fair, 1912.....	389-406
Irish Potatoes, Comparative Table for Ten Years.....	204-205

L

Law to Regulate the Sale of Feed Stuffs in Ohio.....	729-730
List of Certified Agents, 1912.....	808-811
List of Certified Dealers, 1912.....	812
List of Ohio Nurserymen, 1912-1913.....	800-807
List of Ohio Nurserymen Holding Official Certificates of Fumigation, 1913	813

M

Market Quotations, 1912.....	487-489
Meadows, Comparative Table for Ten Years.....	198-199
Mules, Number in Ohio for Ten Years.....	224-225

N

Nitrogen of the Fertilizer Sack, The, by Chas. E. Thorne.....	470-474
---	---------

O

Oats, Comparative Table for Ten Years.....	194-195
Ohio Fertilizer Law.....	617
Ohio State Board of Agriculture, Auditing Committee.....	2-4
Ohio State Board of Agriculture, Farmers' Institute Committee.....	2-4
Ohio State Board of Agriculture, Grounds and Building Committee.....	2-4
Ohio State Board of Agriculture, List of Members.....	2-4
Ohio State Board of Agriculture, List of Members, 1846 to 1912.....	5-8
Ohio State Board of Agriculture, List of Officers.....	2-4
Ohio State Board of Agriculture, List of Officers, 1846 to 1912.....	9
Ohio State Board of Agriculture, Transactions of 1912.....	17

P

Phosphoric Acid in Phosphate Slag, The, by N. W. Lord.....	483
Phosphorus and Lime for Chicken Feeding, by F. S. Jacoby.....	660-661

	PAGE.
Potash, by E. E. Somermeier.....	467-470
Purchasing of Feed Stuffs, The, by Alfred Vivian.....	638-641

R

Raw Materials for Home-Mixing of Fertilizers.....	437
Raw Phosphate Rock as a Fertilizer, by Chas. E. Thorne.....	449-453
Rye, Comparative Table for Ten Years.....	192-193

S

Screenings and Their Use in Feeds, by Dr. E. Brown.....	641-648
Sheep, Number in Ohio for Ten Years.....	226-227
Soil Analysis not a Sufficient Guide to the Use of Fertilizers, by Chas. E. Thorne	481-483
Soil Element Deficiency.....	479-480
State Board of Live Stock Commissioners, Tenth and Eleventh Annual Report of, 1910-1911—1911-1912.....	817-841
Summary of the Law Affecting Feed Stuffs.....	633-634
Suggestions Concerning Use of Commercial Feeds, by B. E. Carmichael.....	663-665
Supplementary List of Ohio Nurserymen, Agents and Dealers Received too Late for Classification.....	814-815

T

Tables of Comparative Statistics as Compiled by the Sec'y of Agriculture.....	188-215
Tabular Statement, Giving Number of Live Stock by Counties.....	114-115
Table Showing the Annual Production and Price of Wheat and Corn for the Years 1850 to 1912.....	116-117
Table Showing the Average Production and Price of Wheat and Corn by Decades	118
Tabulated Analyses and Valuations of Commercial Fertilizers.....	490-599
Tabulated Valuations of Commercial Fertilizers for the Year Ending December 31, 1912.....	611-612
Tankage as a Feed for Swine, by B. E. Carmichael.....	661-663
Twelve Important Facts a Farmer Should Know When Purchasing Fertilizers, by Henry G. Bell.....	416-418
Tobacco, Comparative Table for Ten Years.....	206-207

U

Use of Commercial Fertilizers for Ten Years.....	216-217
Use of Fertilizers, by N. W. Lord.....	480-481

V

	PAGE.
Valuations of Commercial Fertilizers.....	484-485
Valuations of Commercial Fertilizers.....	610-611
Valuation Table Used for Brands of Commercial Fertilizers Licensed During 1912.....	485-486

W

Weight of One Quart of Various Feeding Stuffs, The.....	666
What is Lime? By Chas. E. Thorne.....	474-479
Wheat, Comparative Table for Ten Years.....	188-189
Wool, Comparative Table for Ten Years.....	218-219

TRANSACTIONS

OF THE

Ohio State Board of Agriculture

For Year 1912

DEPARTMENT OF AGRICULTURE,
COLUMBUS, OHIO.

State Board of Agriculture met Wednesday, January 31, 1:30 p. m., 1912, with all members present except Mr. Beidler.

Minutes of Board meeting of January 10th read and approved.

Secretary Sandles stated that plans and specifications for farm buildings on Serum Farm had been approved by the Governor and Auditor of State, and now in hands of Secretary of State, awaiting his signature.

Secretary read provisions of House Bill 18,005, reference appropriation of \$100,000 for agricultural and horticultural exhibits in the various states, same now pending in National Congress.

It was moved by Mr. Dean, seconded by Mr. Kilgore, that Ohio State Board of Agriculture endorse House Bill 18,005, and request active support of United States Senators and Representatives. Motion unanimously carried.

It was proposed by Mr. Cromley, seconded by Mr. McFarland, that time now having arrived to elect officers and employees of the Board for ensuing year, same be taken up at this time. Motion carried.

It was moved by Mr. Lybarger that election be by ballot. Motion seconded and carried unanimously

Result of balloting was as follows:

For President—Jacob Dean.

For Vice-President—E. L. Lybarger.

For Treasurer—L. W. Kilgore.

It was proposed by Mr. Cromley, and duly seconded, that Board at this time convene in executive session for election of Secretary. Motion carried.

It was moved by Mr. Cromley, seconded by Mr. Ewart, that salary of Secretary of the Board be fixed at \$5,000 per annum, to be paid from appropriated funds. On roll call motion carried unanimously.

Board next proceeded to vote for Secretary. Result of ballot showed A. P. Sandles unanimously elected.

In the matter of election of Assistant Secretary, it was proposed by Mr. Farnsworth, and duly seconded, that rules be suspended and Secretary authorized to cast ballot for J. W. Fleming, at a salary of \$2,600. Unanimously carried.

At this point selection of employes of the Board was taken up, and upon recommendation of Secretary Sandles it was moved by Mr. Kilgore and seconded by Mr. McFarland that following persons be employed for ensuing year at salaries given below. On roll call motion carried unanimously.

E. J. Filbin, Chief Clerk-----	\$1,400 00 per annum
S. K. Johnson, Fertilizer and Feed Clerk-----	1,320 00 " "
H. F. Fricke, Fertilizer and Feed Clerk-----	1,200 00 " "
Jos. Justice, Clerk-----	1,200 00 " "
N. E. Shaw, Chief Insp. N. and O.-----	2,100 00 " "
Cora Dale, Bookkeeper-----	1,000 00 " "
Hannah Jones, Stenographer-----	1,000 00 " "
Margaret Hayes, Stenographer-----	720 00 " "
Eleanor Critchfield, Stenographer-----	900 00 " "
H. C. Schwarz, Supt. Fair Grounds-----	1,000 00 " "
I. N. Stroud, Messenger-----	840 00 " "
H. J. Speaker, Chief Dep. Ins. N. and O.-----	1,200 00 " "
W. E. Evans, Jr., Dep. Ins. N. and O.-----	1,080 00 " "
E. W. Mendenhall, Dep. Ins. N. and O.-----	1,080 00 " "
F. D. Heckathorn, Dep. Ins. N. and O.-----	1,080 00 " "
E. J. Hoddy, Dep. Ins. N. and O.-----	1,080 00 " "
R. S. McKay, Dep. Ins. N. and O.-----	900 00 " "
H. D. Leach, Dep. Ins. N. and O.-----	900 00 " "
F. N. Fagan, Dep. Ins. N. and O.-----	900 00 " "
Dr. Paul Fischer, State Veterinarian-----	3,600 00 " "
G. H. Pierce, Asst. State Veterinarian-----	1,500 00 " "
F. A. Zimmer, Chief Field Veterinarian-----	1,500 00 " "
D. M. Swinehart, Field Veterinarian-----	1,200 00 " "
D. J. Frame, Field Veterinarian-----	1,200 00 " "
E. W. Porter, Field Veterinarian-----	1,200 00 " "
B. H. Olds, Field Veterinarian-----	1,200 00 " "
M. B. Lamb, Specialist Tuberculosis Diseases-----	2,000 00 " "
A. D. Fitzgerald, Pathologist-----	2,000 00 " "

Dr. Jones and Mr. Boda, representing Columbus Centennial Commission, appeared before Board relative to holding of the Centennial in connection with the State Fair.

It was explained to them by Mr. Lybarger that it was the consensus of opinion of Board members that in view of the fact that the live stock exhibits at the Fair would be compelled to leave said Fair on Friday, August 30th, for the purpose of attending other State Fairs, and from the fact that many county fairs have arranged their dates for week of September 2d to 6th, the Ohio State Fair could not be held more than one week, that beginning August 26th.

Probable changes in program of the Centennial were taken up and freely discussed in a most friendly spirit.

It was proposed by Mr. Farnsworth, seconded by Mr. Lybarger, that Ohio State Fair be held from Monday, August 26th, to and including Saturday, August 31st, and arrangements for program of week of September 2d to 6th to be placed in charge of Messrs. Sandles and Fleming and the representatives of Ohio Centennial Commission. Motion carried.

President Dean appointed members of the Board to following departments of the State Fair:

Horse Department—E. L. Lybarger.

Cattle Department—J. A. Beidler.

Swine Department—J. F. Cross.

Sheep and Poultry Departments—C. W. McFarland.

Women's and Art Departments—T. E. Cromley.

Horticultural and Agricultural Departments—W. G. Farnsworth.

Machinery and Implements—P. G. Ewart.

Mechanics and Manufacturers' Products—C. H. Ganson.

Merchandise and Music—C. H. Ganson.

President Dean also appointed the following committees for the year 1912:

Grounds and Buildings—Messrs. Dean, Ganson and Cromley.

Farmers' Institute—Messrs. Lybarger, Cross, Farnsworth and Ewart.

Auditing—Messrs. Beidler, Kilgore and McFarland.

Secretary Sandles presented to the Board plans for display of rural school work at State Fair, and same were approved.

No further business, Board adjourned at 5:30 p. m.

DEPARTMENT OF AGRICULTURE,
COLUMBUS, OHIO, March 6, 1912.

Pursuant to call, Ohio State Board of Agriculture met Wednesday, 10 a. m., March 6th, with following members responding to roll call: Messrs. Dean, Kilgore, Farnsworth, Ewart, Cromley, Lybarger, Ganson and Cross. Mr. Beidler absent on account of illness, Mr. McFarland reporting at afternoon session.

Secretary read minutes of Board meeting of January 31st. Same approved.

Secretary Sandles reported on the following:

That in response to letters sent out from the Department, reference H. B. 18,005, providing for appropriation of \$100,000 by the United States for agricultural and horticultural exhibits in the various States, favorable replies were received from all Ohio Congressmen.

That Centennial Commission had passed resolution to readjust program, so as to bring many of their main features within week of State Fair.

That after conference with Secretary of Agriculture Wilson, reference United States Department of Agriculture exhibit at coming State Fair and Centennial Celebration, promise had been secured that such exhibit would be granted, on condition that Centennial Commission make application, and that hotel and traveling expenses of persons in charge of exhibit be paid by the Ohio Department.

At this point Dr. Jones, of the Centennial Commission, appeared before the Board, relative to employment of union labor on State Fair Grounds, in so far as possible, and asked that representatives of the

leading labor unions be granted an audience with the Board at afternoon session.

It was proposed by Mr. Ewart, seconded by Mr. Cromley, that Board give a hearing to committee from Federation of Labor at 3:30 p. m. Motion unanimously carried.

Secretary Sandles presented following recommendations of Mr. H. C. Schwarz, superintendent State Fair Grounds:

Columbus, March 4, 1912.

The Ohio State Board of Agriculture, Columbus.

Gentlemen:—I beg to submit the following recommendations for repairs and improvements on State Fair grounds:

Iron fence around race track should be completed, and include three double gates. Old fence is absolutely beyond repair. I recommend painting iron fence on 11th avenue, from Superintendent's residence, west.

One-half of power hall needs slate roof. Last year during fair when it rained exhibitors in same were compelled to move. If old engine house is used, a new slate roof will be needed for same. Two of the outside toilets need new roofs. Half of teamster's dwelling needs new roof. Water line should be extended to this dwelling, as occupants have been compelled to carry water from grandstand all winter. I recommend that architect examine roof on Horticultural building, as I regard it in a dangerous condition.

Speed horse barns all need painting and new spouting. Machinery buildings and power hall need painting and new gutters. All other buildings need general repairs—painting, repairs to roofs and gutters. The Grant building especially needs painting.

I also recommend new roads and more drainage. A new track drag scraper is badly needed; also one two-horse wagon, with Melrose convertible wagon bed, and one horse, weighing from 1,350 to 1,400 pounds. I also find that a road scraper is very necessary for our work.

I recommend the placing of 24 sanitary drinking fountains. The old fountains are in such condition that repairs would cost as much as new ones.

Respectfully submitted,

H. C. SCHWARZ, Superintendent.

Moved by Mr. Kilgore, seconded by Mr. Lybarger, that above recommendations be accepted and approved, and that Grounds and Buildings Committee be instructed to act on same. On roll call, motion carried unanimously.

In the matter of purchase of horse for State Fair Grounds it was proposed by Mr. Lybarger, seconded by Mr. Ganson, that Mr. Schwarz be authorized to act. Motion carried.

At 12 o'clock noon Board recessed until 1:00 p. m., at which time it reconvened and proceeded to the opening of bids for construction of buildings on State Serum Farm. The following were received and tabulated:

FOR TWO FARM COTTAGES.

A. Boyer & Son.....	\$6,334 00
Jasper Cohagen	5,976 00
Moor Bros.....	5,444 00
C. W. Schneider	5,925 00
Frankenburg Bros.....	6,657 40

**FOR STORAGE BARN, FARM BARN, PIGGERY AND SANITARY MANURE
PITS.**

A. Boyer & Son.....	\$13,388 00
Jasper Cohagen	12,922 00
Moor Bros.....	14,600 00
C. W. Schneider	14,620 00
Frankenburg Bros.....	16,500 00

WATER MAINS.

Huffman-Conklin Co.....	\$1,233 00
Saml. A. Esswein Co.....	1,074 00
W. H. Conklin Co.....	1,269 00

Moved by Mr. Farnsworth, seconded by Mr. Kilgore, that bid of Moor Brothers for \$5,444 on two farm cottages, being the lowest and regular in all respects, be accepted. On roll call, motion unanimously carried.

Moved by Mr. Farnsworth, seconded by Mr. Ewart, that bid of Samuel A. Esswein for \$1,074 on water mains for Serum Farm, being the lowest, be accepted. On roll call all members voted aye.

It was proposed by Mr. Cromley, seconded by Mr. Kilgore, that whereas, all bids on storage barn, farm barn, piggery and sanitary manure pits being above estimate of architect, same be rejected. Motion unanimously carried.

It was proposed by Mr. Ganson, seconded by Mr. Ewart, that Secretary be authorized to readvertise for bids on above-named buildings. Motion carried.

Secretary Sandles presented necessity of definite action by the Board as to erection of Dairy Building on Ohio State Fair Grounds, \$10,000 being available for this purpose.

Mr. Cromley proposed, and Mr. Ganson seconded, that architect be instructed to draw plans for modern dairy exhibit and demonstration building, complete, for Ohio State Fair Grounds. On roll call, motion carried.

In the matter of night shows for Ohio State Fair, it was moved by Mr. Ewart, and duly seconded, that same be held from August 26th to 30th, inclusive. Motion carried.

Mr. Farnsworth proposed, Mr. Lybarger seconded, that Secretary be instructed to advertise for bids on sale of concessions at coming State Fair, said bids to be received until date of April meeting of State Board of Agriculture. Motion carried unanimously.

Reference sale of space in State Fair buildings for 1912 Fair, it was moved by Mr. Lybarger, seconded by Mr. Cross, that Secretary be authorized to sell space in all buildings, except that in Machinery Buildings, this to be assigned June 13th by Mr. Ewart, member in charge. Motion carried.

It was proposed by Mr. Kilgore, seconded by Mr. Farnsworth, that all inside space in exhibit buildings be let at ten cents per square foot, except that occupied by State and Federal exhibits. Motion carried.

At this point representatives of the Federation of Labor appeared before the Board, per arrangement at morning session. The following gentlemen urged claims of union labor for recognition on State Fair Grounds, and use of union label on literature sent out from the Department:

Mr. S. H. Boggs, representing Carpenters' Union.

Mr. A. S. Rowe, representing Painters' Union.

Mr. E. Wakefield, representing Bricklayers' Union.

Mr. J. H. Henderson, representing Machinists' Union.

Prof. Oscar Erf, of the Dairy Department, College of Agriculture, Ohio State University, appeared before Board in response to invitation, and offered valuable suggestions for principal features of a Dairy Building for the Fair Grounds.

No further business, Board adjourned until Thursday morning, March 7th.

Board convened in session 9:00 a. m. Thursday morning, March 7th, with all members present except Mr. Beidler.

In the matter of improving appearance of State Fair Grounds, the following actions were taken:

Proposed by Mr. Kilgore, seconded by Mr. Lybarger, that old Press Building be torn down and rebuilt in another location, and that Grounds and Buildings Committee be entrusted with work of carrying out wishes of the Board. Motion carried.

It was moved by Mr. Farnsworth, seconded by Mr. Ewart, that old Power Plant be wrecked and removed. Motion carried.

Moved by Mr. Ganson, seconded by Mr. Kilgore, that secretary be authorized to purchase all buildings on Fair Grounds owned by outside parties. Motion carried.

Reference funds for advertising State Fair, it was moved by Mr. Ganson, seconded by Mr. Cromley, that \$15,000 be appropriated for advertising purposes. On roll call motion carried.

In the matter of shows and attractions for the Fair, it was proposed by Mr. Ganson, seconded by Mr. Cross, that Secretary be authorized to solicit bids on same for presentation at April meeting of the Board. Motion unanimously carried.

Moved by Mr. Ganson, seconded by Mr. McFarland, that \$12,000 be appropriated for Speed Department of the 1912 Fair. On roll call motion unanimously adopted.

Secretary stated that letters had been mailed to county fairs, granges, bankers, grain dealers and millers of the State, asking that sufficient funds be raised to pay expenses of one or more boys from each county to Washington, D. C., and return, the boy to be the one growing best acre of corn in 1912, favorable replies already having been received.

It was moved by Mr. Ganson, seconded by Mr. Ewart, that Monday, August 26th, 1912, be designated as Ladies' Day at the State Fair. Motion carried.

Moved by Mr. Ewart, seconded by Mr. Kilgore, that invitation be extended to Ohio State Grange to hold its annual reunion on the Fair Grounds during week of State Fair. Motion carried.

Moved by Mr. Cromley, seconded by Mr. Kilgore, that Saturday, August 31st, be designated as Children's Free Day at State Fair. Motion prevailed.

Moved by Mr. Ganson, seconded by Mr. Lybarger, that Civil War veterans be admitted free to Fair Grounds, Saturday, August 31st. Motion prevailed.

At this point revision of premium list for 1912 Fair was taken up.

HORSE DEPARTMENT.

Moved and seconded that animals shown in Books 1 and 2 (Roadsters—Standard and Non-Standard) are eligible to show in Book 3 (American Carriage Horses). Motion carried.

At this point Prof. Marshall, Mr. McLaughlin and Mr. Shepard, representing Ohio Percheron Breeders' Association, appeared before the Board and urged that it take favorable action in the matter of securing National Futurity Colt Show for Ohio State Fair. Said show to be sold to highest bidder. Also requesting that movement be started for Futurity Show of Ohio-bred colts.

Mr. McLaughlin also urged advisability of eliminating from premium list "Get of Sire" and "Produce of Mare" and substituting therefor show of four stallions and two mares.

It was moved by Mr. Lybarger, seconded by Mr. Farnsworth, that in Book 7 (Percheron or French Draft) "French Draft" be eliminated. Motion carried.

Mr. C. J. Smith, Reynoldsburg, Ohio, exhibitor in Horse Department, requested that premiums in Books 1, 2 and 3 be increased.

Following action was taken on above question: That instead of increasing premiums already offered, a fourth premium be awarded in Books 1 and 2.

Secretary Sandles read communication from Percheron Society of America, stating that special offer was made to Ohio State Fair exhibitors of Percheron horses.

Moved by Mr. Farnsworth, seconded by Mr. Cromley, that said offer be accepted and printed in premium list. Motion prevailed.

Communication was read from Association of Importers and Breeders of Belgian Draft Horses, offering special prizes for Belgian draft horses at State Fair.

Moved and seconded that above proposition be accepted. Motion prevailed.

CATTLE DEPARTMENT.

Mr. P. G. Ross, representing Carpenter & Ross, appeared, asking that Board protest against certain rules of American Shorthorn Breeders'

Association, said rules requiring elimination of aged cow from herd, and addition of cow in milk over forty-two months old.

It was also suggested by Mr. Ross that Board offer premiums for small Ohio breeders of Shorthorns, and stating that if Board would add \$100 for this purpose, Ohio Association of Shorthorn Breeders would add another \$100.

Recommendation was also made that judge be selected sometime before Fair and name published in catalogue.

At this point Board recessed for lunch until 1:30 p. m., at which time it resumed business.

Secretary read communications from Aberdeen-Angus Breeders' Association offering \$200 as special prize money for State Fair; that from Galloway Breeders of Ohio, offering \$50, and one from Red Polled Cattle Club, offering \$100.

It was moved and seconded that Board accept said offers. Motion prevailed.

It was moved and duly seconded that class for Shorthorn Steers be eliminated from premium list. Motion carried.

SWINE DEPARTMENT.

Moved by Mr. Lybarger, seconded by Mr. Kilgore, that Board accept Mr. Cross's recommendation that full classification be granted Hampshires. Motion prevailed.

Request having come from many breeders of Mule Foot Hogs that same be given classification in premium list, and upon recommendation of Member-in-Charge Cross, it was proposed by Mr. Ganson, seconded by Mr. Kilgore, that not to exceed \$200 be appropriated for premiums for Mule Foot Hogs, classification to be similar to that given Tamworths. Motion unanimously carried.

Secretary Sandles read communications from secretaries of American Berkshire Association, American Duroc-Jersey Association, and National Duroc-Jersey Breeders' Registry Association.

It was moved and seconded that recommendations contained therein be approved and accepted. Motion carried.

SHEEP DEPARTMENT.

Prof. C. S. Plumb, Ohio State University, appeared before Board on behalf of the Ohio Association for Promotion of Pure-Bred Sheep, and presented offers of the several associations, students of Agricultural College, O. S. U., and those of individual parties, on condition that State Board of Agriculture increase premiums.

Mr. L. B. Palmer, representing Ohio Shropshire Breeders' Association, presented offer of that association of \$50 for pen of four-year-old Shropshire rams, to be owned and bred by exhibitor, who must be member of Ohio Shropshire Breeders' Association, and asking that Board make increase of \$50 in its premiums.

Mr. S. M. Cleaver, Delaware, Ohio, representing Merino Breeders' Association, requested increased premiums for Merino Sheep at Ohio State Fair.

At this point Prof. Plumb presented to Board desirability of having at State Fair exhibit of animals owned by State University, such exhibit not to be made for premium money, but for placing of the animals.

Also suggested that larger amount of money be appropriated by Board for Students' Judging Contest, and that more space be provided in Sheep Building for display of wool.

Further consideration of classification in Sheep and Poultry Departments was deferred at this point, and Mr. McFarland, member-in-charge, authorized to take up matter and report at next meeting.

FARM PRODUCTS.

On recommendation of Mr. Farnsworth, member-in-charge, number of changes were made in classifications.

HORTICULTURAL PRODUCTS.

Mr. Livingston, representing Livingston Seed Company, of Columbus, appeared before Board, recommending that competent judge be employed for the judging of flower display. He also recommended that a requirement should be made that all exhibits be up on time; that higher premiums should be offered and no premium awarded where exhibit is unworthy of same.

Classification of Women's and Fine Arts Department left in hands of Member-in-Charge Cromley, to report at next meeting of Board.

No further business, Board adjourned at 5:30 p. m.

DEPARTMENT OF AGRICULTURE,

COLUMBUS, OHIO, April 10, 1912.

Pursuant to call, Ohio State Board of Agriculture met at offices of the Department Wednesday, April 10th, 10 a. m. The following members responded to roll call: Messrs. Dean, Cromley, McFarland, Ewart, Ganson, Cross, Cromley, Lybarger and Kilgore. Letter was read by Secretary from Mr. Beidler, expressing his inability to be present on account of illness.

Minutes of Board meeting of March 6th and 7th read and approved.

Record of transactions between Secretary Sandles and Superintendent Schwarz, of State Fair Grounds, and various manufacturers of machinery read and approved.

Mr. H. D. Shepherd, representing swine breeders, appeared before

Board, with request that Board appropriate \$300 for Poland China Futurity Show for Ohio State Fair.

It was proposed by Mr. Kilgore, seconded by Mr. Cromley, that Board appropriate \$300 for said Futurity Show—\$150 for 1912 and same amount for 1913 State Fair. On roll call motion was adopted.

Mr. Townsend, owner of lunch stand on State Fair Grounds, presented facts in reference to the erection of same by himself and brothers in the year 1886, stating that they had occupied said stand every year since that time.

It was moved by Mr. Cromley, seconded by Mr. Ganson, that Board allow Mr. Townsend \$50 for use of lunch stand. Motion unanimously carried.

Mr. E. L. Huffman, publisher of race score cards, appeared before Board, reference program privilege for Ohio State Fair races, presenting samples of program, also caps, coats and numbers for race horse drivers.

The Secretary reported that the Governor, Auditor of State and Secretary of State had approved plans and specifications for readvertising of piggery, sanitary manure pits, storage barn and farm barn on State Serum Farm.

Secretary presented following report and recommendations of Architect Holbrook on State Fair Grounds buildings, fences, etc.:

It was moved by Mr. Farnsworth, seconded by Mr. Kilgore, that suggestions and recommendations be approved, and that Grounds and Buildings Committee be authorized to carry out same. On roll call motion carried.

Architect Holbrook presented plans and estimates for Model Dairy Building on State Fair Grounds.

After examination of same by members of Board it was moved by Mr. Cromley, seconded by Mr. Lybarger, that said plans be approved and accepted and that Secretary be instructed to advertise for bids on same, building to be completed by August 15, 1912. On roll call motion adopted.

At 12:30 Board recessed for lunch.

Board reconvened at 1:30 and immediately proceeded to open bids for concessions and privileges for 1912 State Fair. The following were opened and read:

W. C. T. U., Dining Hall.....	\$625 00
Grace M. E. church, Dining Hall.....	300 00
I. N. Whipps, Booth No. 1 under grandstand.....	200 00
I. N. Whipps, Booth No. 2 under grandstand.....	125 00
I. N. Whipps, building east of Women's building.....	150 00
I. N. Whipps, building north of Administration.....	141 00
I. N. Whipps, building at race track.....	107 00

I. N. Whippe, booth in Power Hall.....	\$82 00
Glenwood M. E. church, Booths 10 and 11 under grandstand.....	250 00
West Second Ave. Presbyterian church, Booths 8, 9, 10, 13 or 14 under grandstand	150 00
West Second Ave. Presbyterian church, Booth, any from 1 to 7.....	125 00
West Second Ave. Presbyterian church, Booth 14 or 15.....	100 00
O. S. Townsend, Townsend lunch stand.....	400 00
S. J. Shartle—Grandstand privileges.....	100 00
S. J. Shartle, building south of grandstand.....	125 00
S. J. Shartle, building at race track.....	100 00
O. F. Ehring, riding devices.....	301 50
C. Sharrock, candy.....	300 00
C. Sharrock, peanuts.....	300 00
C. Sharrock, popcorn.....	250 00
C. Sharrock, if granted the three.....	910 00
C. Sharrock, for same locations as 1911 fair.....	1,110 00
S. J. Shartle, candy and popcorn.....	350 00
S. J. Shartle, peanuts.....	175 00
Jordan & Bernstein, score cards.....	246 00
A. Robert Bryson, score cards.....	301 00
E. L. Huffman, score cards.....	310 00
R. R. Colwell, score cards.....	225 00
Edward Hertlein, fruit.....	175 00
Bert Williams, fruit.....	150 00
Chas. Schullman, ice cream cones.....	530 00
Chas. Schullman, soft drinks in grandstand.....	25 00
C. Sharrock, ice cream cones.....	510 00
S. J. Shartle, ice cream cones.....	300 00
Ralph R. Connell, Cattle Building booth.....	70 00
Desplenter Bros., novelties.....	750 00
Grant Wooley, balloons.....	100 00
Grant Wooley, canes and pennants.....	100 00
Grant Wooley, rubber balls.....	100 00
Grant Wooley, whips.....	100 00
Grant Wooley, paper shakers.....	25 00
Grant Wooley, for the four.....	425 00
Ross Guild, post cards.....	35 00
E. P. Filbin, two booths in horse barn.....	80 00
Mrs. J. H. Cohen, glass engraving, Women's building.....	50 00
Lewis Weddington, cider, one location.....	150 00
Lewis Weddington, cider, three locations.....	225 00
W. R. Fisher, cider.....	100 00
C. G. Fredericks, tin types.....	100 00
C. A. McNeal, sign writing, two locations.....	101 00
W. H. Arnold, jewelry.....	265 00
W. H. Arnold, orangeade, two locations.....	245 00
Durbin Bros., check room.....	65 00

It was proposed by Mr. Cromley and duly seconded that on account of unsatisfactory conduct at a previous fair, Board refuse to receive and consider bid of Edward Tertlein of \$175 for fruit concession. Motion carried.

Moved by Mr. Lybarger, seconded by Mr. McFarland, that following bids be accepted and Secretary authorized to enter into contract. Motion unanimously carried.

W. C. T. U., Dining Hall.....	\$625 00
Grace M. E. church, Dining Hall.....	300 00
I. N. Whipps, building east of Women's building.....	150 00
Glenwood M. E. church, Booths 10 and 11 under grandstand.....	250 00
West Second Ave. Presbyterian church, Booth No. 8, grandstand.....	150 00
Bert Williams, fruit.....	150 00
Chas. Schullman, ice cream cones.....	530 00
Durbin Bros., check room.....	65 00
Desplenter Bros., novelties.....	750 00
C. G. Frederick, tin types.....	100 00
C. A. McNeal, sign writing.....	101 00
E. L. Huffman, score cards.....	310 00
W. H. Arnold, jewelry.....	265 00
W. H. Arnold, orangeade.....	245 00
Ross Guild, post cards.....	35 00
E. P. Filbin, horse barn.....	80 00
O. S. Townsend, Townsend lunch stand.....	400 00
Mrs. J. H. Cohen, glass engraving.....	50 00
Lewis Weddington, cider.....	150 00

In the matter of securing electric current for light and power at State Serum Farm, it was moved by Mr. Ganson, seconded by Mr. Cromley, that Secretary Sandles be authorized to arrange for conference between Ohio State Board of Agriculture and Mr. Schoepf and officials of Ohio Electric Railway Company. Motion unanimously carried.

Mr. J. D. Mercer, Columbus, Ohio, appeared before the Board, reference "Buckeye Beauty Parade," said parade to be composed of two most beautiful young ladies, between 18 and 25, selected from each county of the State. Contest to be conducted by the two leading newspapers in each county. Parade to be on the principal streets of Columbus during time of holding State Fair, and prizes to be awarded on State Fair Grounds.

Mr. Alexander Allan, representative of the Allan Pyro-Spectacular Company, Rochester, N. Y., appeared before the Board with proposition to present war spectacle and aviator at State Fair, six nights, for \$6,000.

Mr. Duffield, representing Newton & Duffield, of Chicago, next appeared before the Board, with proposition to stage "Pioneer Days" spectacle and vaudeville acts for \$5,200 for five nights.

Mr. L. H. Backenstoe offered proposition of 25% of total admission fees for privilege of showing horse Mazeppa and Old-Fashioned School, two separate shows, at State Fair. Also three free acts for \$600.

Board authorized Secretary to contract for fireworks and shows.

Secretary read communication from Miss Mary Burnite, New York

City, reference bill of \$69.05 for five days' institute work in Ohio. Secretary explained to Board that having corresponded with Miss Burnite in the autumn of 1911, reference her rates, and learning that same were \$8 per day and expenses, no contract was made with her to do Ohio institute work; that during January Miss Burnite had written, asking for opportunity to present her fireless cooker at a few institutes, and same was granted, with no contract for salary or expenses. Matter left in hands of Secretary.

Secretary read communication from Ohio Farmer, making special offer of trophy cups to encourage Ohio Live Stock Breeders.

It was moved and duly seconded that Secretary be instructed to advise editor of Ohio Farmer that such offer would be given space in State Fair premium list. Motion carried.

Mr. McFarland, member-in-charge of Sheep Department, presented report on revision of said department of premium list.

On motion of Mr. Lybarger, seconded by Mr. Ewart, report of Mr. McFarland was adopted. Motion carried.

Mr. McFarland, as member-in-charge of Poultry Department, recommended that classification be given Silver Campines; also that "pen" be added to White Orpingtons.

Moved and seconded that above recommendations as to revision of Poultry Department, be adopted. Motion carried.

Mr. Clark Doughty at this point appeared before the Board, reference increase of salary as advertising agent of Columbus Centennial.

It was proposed and duly seconded that Mr. Doughty's salary be increased from \$133.33 to \$250 per month, effective on and after April 16th, until close of 1912 Centennial. Motion carried.

No further business, at 6:30 o'clock p. m., on motion of Mr. Cromley, Board adjourned.

COLUMBUS, OHIO, April 30, 1912.

At the call of the Chairman, Mr. Dean, the Committee on Buildings and Grounds convened in session at 10 o'clock a. m., and thereupon recessed to visit and inspect the State Serum Farm and the buildings and improvements thereon.

In the matter of placing sewer pipe in the old ditch on the line of the fence, northwest corner of said farm, to the distance of about 200 feet, the Committee, upon motion of Mr. Ganson, seconded by Mr. Cromley, decided to place, in said ditch eighteen-inch sewer pipe, and that said old open ditch be filled up and a proper grade made, whereon to construct a line fence.

On the motion, those voting aye were Mr. Dean, Mr. Cromley and Mr. Ganson.

In the matter of purchasing horses to do the farm and improvement work on the State Serum Farm, Mr. Cromley moved and Mr. Dean seconded that Mr. Ganson be authorized to purchase two teams of good horses at a price not to exceed five hundred dollars a team.

Upon roll call the following members voted aye on said motion: Mr. Dean, Mr. Cromley and Mr. Ganson.

In the matter of purchasing wagons and other farm implements, Mr. Ganson moved that the Secretary be authorized to purchase wagons, harrows, plows and necessary farm implements.

Upon roll call the following members voted aye: Mr. Dean, Mr. Ganson and Mr. Cromley.

The Committee called the attention of Architect Holbrook to some bad construction work in the foundation of some of the buildings at the Serum Farm, and requested Mr. Holbrook to give more personal attention to said construction, or to employ a superintendent to do the same.

The Committee then visited the State Fair Grounds and the improvements being done thereon.

The addition to the Sheep Building was gone over and the attention of the contractors called to some defective work in laying of brick, and the architect was requested to have same corrected.

The Committee authorized Superintendent Schwarz to fill in with dry cinders or sand inside the new sheep addition to the height of the cement foundation work.

The superintendent was authorized to construct cinder driveways and walks around many of the buildings and alleys, and to provide better drainage in certain parts of the ground.

The Committee authorized the construction of a continuance of the brick pavement north of the brick pavement west of the Grandstand.

The Committee advised the superintendent to hasten the work of planting shrubbery and ornamental trees.

CINCINNATI, OHIO, Friday, May 24, 1912.

The Ohio State Board of Agriculture met pursuant to the call of the President.

All members present except Mr. Ganson, Mr. Beidler and Mr. Lybarger.

The object of the meeting being to confer with the officials of the Ohio Electric Railway Company in reference to securing electric current for light and power for the equipment of the State Serum Farm plant at Reynoldsburg.

The Board requested said company to install apparatus capable of furnishing current to the plant in such quantities as the development of the plant would require from time to time.

On behalf of said company, its president, W. K. Schoepf, proposed to build a feed line from Hibernia to said farm at a cost to the Board of about four thousand dollars, and to make a flat rate of five cents per kilowatt hour.

After full discussion the Board requested Mr. Schoepf to submit his proposition in writing, to be considered at a meeting of the Board on June 6, 1912.

There being no further business, the Board adjourned.

COLUMBUS, OHIO, June 6, 1912.

Meeting called to order by the President at 1:30 o'clock p. m.

Present: Jacob Dean, E. L. Lybarger, L. W. Kilgore, J. A. Beidler, J. F. Cross, T. E. Cromley, C. W. McFarland, W. G. Farnsworth.

The minutes of the meeting of April 10th were read and approved.

The report of the meeting of the Committee on Grounds of April 30 was read.

Moved by Mr. Beidler, seconded by Mr. Cromley, that the report be accepted and placed on file. Carried.

The minutes of the meeting at Cincinnati, May 24th, were read.

Mr. Cromley moved that the minutes be approved. Motion seconded and carried.

The following bids were opened:

Dairy building proposal, Nichols & Carr	\$10,780 00
Serum Farm buildings, Moor Brothers	13,188 00
Roofing proposition, Ph. F. Kromer	612 00
Wiring Serum building, The Erner & Hopkins Construction Co.	538 00
Dairy building, Jasper Cohagen	9,273 00
Dairy building, John W. Duffy & Sons	11,014 69
Fence by J. S. Roof, \$1.25 per running foot	1,875 00
Wiring, Sackett Mine Supply Co., Columbus	636 00
Roofing, F. O. Schoedinger	537 00
Dairy building, Thos. H. McLees	11,160 00
Dairy building, Adam Pitts	10,174 00
Serum Farm buildings, Van Gundy & Wilson	12,950 00
Dairy buildings, L. D. Hetrick & Bro.	9,995 00
Iron fence, Wm. Bailey & Bro.	1,570 00
Wire, Correll Electric Company	444 00
Roofing Hirschmann Brothers	538 00
Joe Howard, Dairy building	8,060 00
Serum Farm, Amos Boyer & Son	13,900 00
Dairy building, Amos Boyer & Son	10,223 00
Serum Farm, Chas. Snyder	13,500 00
J. E. Mullen & Co., roofing	515 95

It was moved by Mr. Beidler and seconded by Mr. Kilgore that Jasper Cohagen, having submitted the lowest and best bid, be awarded

the contract of constructing the Dairy Exhibit Building at the State Fair Grounds, and that the recommendations of Mr. Holbrook, architect, that wood construction, tile roof, cement floor, be accepted at \$8,883, which sum is within the appropriation for such building and the estimate of the architect. Carried unanimously.

It was moved by Mr. Farnsworth and seconded by Mr. Beidler that the Building Committee be authorized to select Georgian tile roof at an additional cost of \$80, if in its judgment it was desired. Carried unanimously.

It was moved by Mr. Kilgore, seconded by Mr. Cross, that Van Gundy & Wilson, having submitted the lowest and best bid, be awarded the contract of constructing the Serum Farm buildings. Carried unanimously.

It was moved by Mr. Farnsworth and seconded by Mr. McFarland that Correll Electric Company, having submitted the lowest and best bid on the wiring of the cottages and laboratory at the Serum Farm, be awarded the contract. Carried unanimously.

It was moved by Mr. Farnsworth and seconded by Mr. Cross that all bids on the roofing be rejected and that the matter of repairing said roof be referred to the Building Committee. Carried unanimously.

It was moved by Mr. Farnsworth, seconded by Mr. Kilgore, that Wm. Bailey & Bro., for \$1,570, being the lowest and best bid for 1,500 feet, more or less, of iron fence, be accepted. Carried.

Mr. McFarland moved that the Secretary be authorized to enter into contract with the parties whose bids have been accepted. Seconded by Mr. Kilgore. Carried.

It was moved by Mr. Kilgore and seconded by Mr. Lybarger that the Building Committee be authorized to reconstruct the old Club House at a cost not to exceed \$2,800. Carried unanimously.

The letter from Mr. W. Kesley Schoepf was read by the Secretary.

It was moved by Mr. Cromley and seconded by Mr. Farnsworth that the written proposition of Mr. Schoepf be accepted. Carried unanimously.

Mr. Beidler recommended that the premiums for the Ayrshire cattle be raised to the standard of the Guernseys and other cattle.

Mr. Lybarger moved that the recommendation of Mr. Beidler be approved. Seconded by Mr. Cromley. Carried unanimously.

Mr. Kilgore moved, and Mr. Beidler seconded the motion, that the Building Committee be authorized and instructed to build a wash rack, to be constructed out of old material, at a cost not to exceed \$75. Carried unanimously.

It was moved and seconded that the building of a power and electric substation and pumping house at the Serum Farm be referred to the Building Committee, with power to act. Carried unanimously.

Mr. Farnsworth moved that the Secretary be authorized to confer with some responsible party regarding the employment of a sanitary engineer at the Serum Farm. Motion seconded and unanimously carried.

Mr. Lybarger moved that the bid of J. E. Mullen & Co. for roofing Machinery Hall on State Fair Grounds for \$515.95, being the lowest and best bid, be accepted. Seconded by Mr. Kilgore. Carried.

It was moved by Mr. Kilgore and seconded by Mr. Farnsworth that the Building Committee be authorized to put in about sixty-five pens on west side of the sheep barns, flooring same, for the purpose of housing hogs. Unanimously carried.

It was moved by Mr. Lybarger and seconded by Mr. ——— that the Secretary, Mr. Kilgore, Mr. Dean and Mr. Cross, be appointed a committee to investigate the matter of the Bryan farm and report to the Board. Unanimously carried.

Mr. Kilgore presented the invitation of the Houston Farm Company to the Board of Agriculture to visit their farm near London.

Upon motion the invitation was accepted, the visit to be made at the future convenience of the Board. Unanimously carried.

Mr. Fleming made a report on concessions and space.

Mr. Cromley moved that William Snyder be granted the feed supply privilege. Motion seconded and unanimously carried.

It was moved and seconded that the refund of \$12 for ——— be laid on the table.

Mr. Beidler here leaves the meeting.

The race program was presented and approved.

The Secretary read the letter of John L. Bushnell, and he was invited to attend the next meeting.

The Secretary was instructed to find out the cost of decorating the six central buildings and the Woman's and Art Halls.

The Secretary was instructed to communicate with Mr. Mosure, attorney for Mr. Miller, stating that the testimony was too conflicting for the Board to decide upon the merits of the case.

Upon motion the meeting adjourned.

MINUTES OF THE MEETING OF THE BUILDINGS AND GROUNDS COMMITTEE.

Upon call of the Chairman, Mr. Dean, the Buildings and Grounds Committee met at the Department of Agriculture, Columbus, June 10.

Members present: Dean and Cromley.

In the matter of employing a sanitary engineer to prepare plans and specifications for a sanitary sewer system, sewage disposal plant and disinfectant tanks, Mr. A. E. Kimberly, of No. 8 East Long street,

Columbus, Ohio, a recognized sanitary engineer, was authorized to prepare such plans and specifications, upon condition that such plans and specifications are approved by the State Board of Health, and that such plans, specifications, supervision and construction, to the satisfaction of the Board, shall not exceed twenty-eight hundred dollars; but in no case shall the engineer's compensation for plans, specifications and supervision of construction exceed four hundred dollars; one-half of said compensation to be paid when plans are approved by the State Board of Health and State Board of Agriculture and contract let, and the balance at the option of the Board.

Mr. Dean and Mr. Cromley both voting aye on this proposition.

Mr. Kimberly, being present, accepted and agreed to the performance of the conditions of the resolution.

The Committee visited the State Fair Grounds and located the proposed dairy exhibit building midway between the poultry building and the W. C. T. U. dining hall. Said building to have its frontage north, the north line being on a line with the north side of each of aforesaid buildings.

The Committee authorized Architect Holbrook to have constructed a ladies' toilet on the ground floor of the southwest corner of the West Central Building, and a gents' toilet in the southeast corner ground floor of said building; cost of both not to exceed \$300.

The Committee authorized the removal of the telephone poles immediately north of the Administration Building.

The Secretary presented contracts for the construction of a storage barn, farm barn, piggery and sanitary manure pits at the State Serum Farm, and a Dairy Exhibit Building at the State Fair Grounds.

MEETING STATE BOARD OF AGRICULTURE.

COLUMBUS, OHIO, July 10, 10:30.

The State Board of Agriculture met in pursuance to the call of the President.

The roll call showed the following members present: Messrs. Dean, Lybarger, Kilgore, Ewart, Beidler, Cross, Cromley, McFarland and Ganson.

The minutes of the previous meeting were read and approved.

Mr. L. V. Rodda, representing the Lawrence Publishing Company, of Cleveland, appeared before the Board to ask permission to build an addition to its building on the Fair Grounds, to be used as a check room.

Mr. Ewart moved that on account of the growing needs for space for machinery exhibits it is the sense of the Board that no further con-

cessions be granted for space east of the central buildings. Seconded by Mr. Ganson and carried.

It was moved by Mr. Lybarger, seconded by Mr. Ganson, that no contract for fence around the track be entered into this year. Unanimously carried.

Harry W. Lewis appeared before the Board and explained his ideas for the decorations of the main buildings.

It was moved by Mr. Ganson and seconded by Mr. Beidler that the matter of decoration of these buildings be referred to the Secretary and Assistant Secretary, with power to act. Unanimously carried.

Mrs. Cromley and Mrs. Nickerson appeared before the Board to ask that new showcases be bought for the Women's Building.

Mr. Lybarger moved that \$500 be set apart to buy showcases, should that much be needed. The roll was called and the motion was unanimously carried.

The Secretary explained the proposed boat trip down the Ohio River.

Mr. Edson, of the Ohio Electric Railway, appeared before the Board and talked over the plans for the proposed trip over the Ohio Electric Railway for the purpose of advertising the Ohio State Fair and Ohio Columbus Centennial.

It was moved and seconded that Mr. Schoepf be invited to exhibit his cattle at the State Fair. Carried.

On motion the Board recessed until 1:30 o'clock.

AFTERNOON SESSION.

Called to order by the President.

The Secretary read a letter, just delivered, from the Lawrence Publishing Company, regarding addition to building, as discussed and acted upon at previous session.

Mr. Ganson moved the letter be accepted and placed on file. Seconded and unanimously carried.

Mr. Holbrook appeared before the Board and explained progress of construction work.

The Board gave instructions for oiling the road, Eleventh avenue from railroad to central gate.

The matter of the advertising trip on the Ohio Electric was again taken up, and Mr. Kilgore moved that the Secretary be instructed to cordially invite to accompany on this trip the two candidates for Governor, the present Executive, and the Mayor of this city. Seconded by Mr. Beidler and unanimously carried.

The Secretary stated that Professor Plumb had telephoned, wanting to know if the Ohio State University could show its horses at regular show, not for premiums, merely for place.

It was moved by Mr. Lybarger, seconded by Mr. Ganson, that it was the sense of the Board that it was not practicable to accept the proposition made.

Also, Professor Plumb wanted to know if the State University could compete in the Percheron Futurity Show.

It was agreed by the Board that the University could go ahead and do as it pleased in this.

The matter of policing the grounds was discussed, and Adjutant General Weybrecht and _____ were invited to appear before the Board, which they did.

It was moved by Mr. Lybarger and seconded by Mr. Cross that the Adjutant General of Ohio be requested to furnish two companies of the National Guard, not to exceed ninety men all told, for police duty on the State Fair Grounds during week of the Ohio State Fair, such National Guardsmen to perform police duty and to take orders and instructions from the members in charge of their respective departments, or their superintendents; compensation for such services to be two dollars per day for each soldier, forty cents for subsistence, and transportation. Carried unanimously.

It was moved by Mr. Ewart that the Board would not entertain any public auction sales on the Fair Grounds during the Fair. Seconded and carried.

The following bids were received:

Columbus, Ohio, July 10, 1912.

Ohio State Board of Agriculture:

Sir:—We will build the substation at the state Serum Farm according to plans and specifications furnished by Dawson & Holbrook, architects, for the sum of seventeen hundred and ninety dollars (\$1,790.00).

MOOR BROS.

By L. R. Moor.

Lancaster, Ohio, July 9, 1912.

The Ohio Board of Agriculture, Columbus, Ohio.

Sirs:—We propose furnish the materials and erect the pump house at Ohio State Serum Farm according to plans and specifications prepared by Dawson & Holbrook for the sum of twenty-four hundred and fifty (\$2,450.00) dollars.

Respectfully submitted,

VAN GUNDY & WILSON,

Van.

Upon motion of Mr. Ewart, seconded by Mr. Cromley, the bid of Moor Bros., for the sum of \$1,790, being the lowest and best bid, was accepted.

In the matter of lumber for new swine pens, the following bids were received:

Acorn Lumber Co., 6,450 ft. Y. P. @ \$23.00 per thousand.
Kelton & Converse, 4,530 ft. of W. P., \$158.55.

Upon recommendation of Harry C. Holbrook, architect, the bid of the Acorn Lumber Company, was accepted.

July 22, 1912.

In the matter of plumbing supplies for exhibitors' new clubhouse, the following bids were submitted:

Columbus Supply Co.....	\$235 56
Scioto Valley Supply Co.....	258 74

The bid of the Columbus Supply Company being the lowest, was accepted on this date.

Columbus, Ohio, 7-10-1912.

The Ohio State Board of Agriculture, Columbus, Ohio.
(In session).

Gentlemen:—In the matter of a request made by the Lawrence Publishing Co., of Cleveland, Ohio, publishers of The Ohio Farmer, whereby permission is asked to build an addition to the present Ohio Farmer building at the State Fair grounds, said addition to be 10½ ft. wide by 12 ft. deep, and to conform to the drawing of same previously filed with the Board.

We would respectfully request that a definite decision refusing permission to build above state addition be not arrived at at the present meeting of the Board, and that action be suspended until such time as we can look up matters having bearing upon our right to request permission from the Board to make the alterations in our building already referred to.

We are,

Very respectfully yours,

THE LAWRENCE PUBLISHING CO.,
Cleveland, Ohio.

Per L. V. Rodda,
Circulation Manager, The Ohio Farmer.

MINUTES OF THE MEETING OF THE STATE BOARD OF
AGRICULTURE.

August 14, 1912.

Meeting called to order by the President at 10 a. m. Present: All the members, excepting Mr. Ganson.

Dr. Sarah Fletcher appeared before the Board, representing the Women's Equal Suffrage Association and the College League, and asked for the privilege of having a tent and rest room upon the Fair Grounds.

Mr. ——— appeared before the Board and requested that the institute in Pickaway County, located at Williamsport, be changed to New Holland.

The Board then went into executive session.

Minutes of previous meeting read and approved.

Mr. Beidler moved that the Secretary be instructed to request the owners of newspapers to paint their buildings previous to the opening of the Fair. Seconded by Mr. Cromley and carried.

Mr. Lybarger moved that it is the sense of this Board that it would be bad policy to grant space to any one for the purpose of circulating political documents and literature. Seconded by Mr. Farnsworth and carried.

Mr. Cromley moved that the Board set aside \$370 for the wheat-growing contest, to be divided as follows: first prize, \$100; second prize, \$75; third prize, \$50; fourth prize, \$40; fifth prize, \$30; sixth prize, \$25; seventh prize, \$20; eighth prize, \$15; ninth prize, \$10; tenth prize, \$5. Seconded by Mr. Lybarger. Carried.

Mr. Cross moved to appropriate \$100 for the best ten ears of corn offered at State Corn Show, Lima, prizes to be competed for by the boys who were entered in the Corn Contest. Seconded and carried.

Mr. McFarland moved that the Bell Telephone Company's proposition be accepted. Seconded and carried.

Mr. Lybarger moved the Crow Motor Car Company's proposition be rejected on account of the danger and inconvenience.

Mr. Beidler moved that it was the sense of the Board that the classification of cattle in the premium list be strictly adhered to. Seconded by Mr. Lybarger and carried unanimously.

Mr. Fleming reported that space was entirely sold out in buildings, all open lots sold, and thirty-one overflow lots.

Mr. Lybarger moved that the restaurant in the clubhouse be under the control of the Board, and its privileges be limited to the members of the Board and their personally invited guests, and that the meals be served at fifty cents and paid for at the time and put in as expense. Seconded and carried.

Mr. Lybarger moved that the Secretary be authorized to extend invitation to such prominent men as in his judgment he deems best. Seconded by Mr. Kilgore. Carried.

Mr. Cromley moved that the veterans of the Civil War be invited to attend the Fair free on Friday, August 30th. Seconded and carried.

Mr. Cromley moved that the roads be oiled if it can be done this week, under the supervision of the Secretary. Seconded and carried.

Mr. Beidler moved, and Mr. Kilgore seconded, that the certificates for the crop reporters be refunded. Unanimously carried.

Mr. Kilgore moved that the boys from the Industrial School be invited to attend the State Fair on same terms as last year. Motion seconded and carried.

Meeting adjourned until afternoon session.

AFTERNOON SESSION.

At 2 o'clock p. m. the Board resumed its sessions in the Senate Finance Committee Room.

Responding to an invitation from the State Board of Agriculture, there were present representatives of several organizations for the purpose of conferring with the Board on the advisability of Ohio making a state display, showing its resources, opportunities and possibilities at the American Land and Irrigation Exposition, Madison Square Garden, New York City, October 15 to November 2.

Gilbert McClurg and T. J. La Jord, of New York, were present and explained the object and scope of the exposition. Mr. McClurg advised that it would afford an opportunity to many investors to find where cheap and profitable lands could be purchased. Other speakers were called upon and expressed their belief that Ohio should participate, as follows:

President Thompson, Ohio State University.

Dr. Chas. E. Thorne, Ohio Experiment Station.

John F. Cunningham, Editor Ohio Farmer.

J. S. Brigham, representing Ohio State Grange, Bowling Green.

H. E. Valentine, Real Estate Board, Columbus.

D. S. Galehouse, State Corn Show Association, Wooster.

S. B. Rankin, Secretary State Bankers' Association, Columbus.

J. W. McCord, State Grain Dealers' Association, Columbus.

T. P. Riddle, Tri-State Grain Dealers' Association, Lima.

Frank Blackford, National Tobacco Growers' Association, Eldorado.

Mr. Muma, New York Central Lines, Cleveland.

Dr. J. S. Jones and Mr. Metcalf, representing Columbus.

It was the sense of the meeting that funds be raised by subscription from interested parties to defray expenses of this enterprise. The conference was unanimous in favor of the project.

Upon motion of Dr. Jones, seconded by Mr. Valentine, the President and Secretary of the State Board of Agriculture were authorized to appoint an advisory committee of fifteen and an executive committee of five, to raise funds and conduct the campaign, and authorized the State Board of Agriculture to receive and receipt for all funds received.

Upon motion the conference adjourned.

Mr. C. B. Miller appeared before the Board in the matter of his being struck by a National Guardsman at the Ohio State Fair, 1911, during a crowded and jammed condition near the race track, occasioned by two horses in a race having fallen upon the track. Mr. Miller said that in his judgment the State Board of Agriculture should grant to him some compensation for the injuries received, claiming that he in no way invited the attack upon himself. Mr. Beidler, member of the Board, stated that he was an eye witness to the accident, and that Mr. Miller struck the soldier first. Mr. Miller said that he could furnish witnesses to the contrary, and expressed a desire to know the name of the party who struck him. After discussion the Board postponed further action until the September meeting.

The report of the Farmers' Institute Committee, recommending certain places for holding of institutes during the winter of 1912-13, was approved by the Board, with an amendment substituting the town of New Holland, Pickaway County, for that of Williamsport, same county.

Upon recommendation of Mr. Cromley, \$75 was appropriated for the purchase of window shades in the Art Hall.

After discussion the Board ordered all exhibit buildings to be open at 6:30 a. m.

The President and Secretary were authorized to operate with the City and State Boards of Health in matters of sanitation at the State Fair Grounds.

In the matter of employing music for the State Fair, the proposition of Mr. Sands to furnish thirty men, morning, afternoon and evening, for \$1,037, said band to report for duty at 9:30 a. m., was upon roll call accepted.

The Secretary presented the duplicate contract, as submitted by the Ohio Electric Railway Company, to furnish current at the State Serum Farm, Licking County, Ohio. Upon motion, duly seconded, said contract was approved, all of the members voting on roll call. The President and Secretary were authorized to sign same.

The Secretary was instructed to advise the Boys' Band from the Soldiers' and Sailors' Orphans' Home, Xenia, that \$150 would be paid for its services during the week of State Fair.

There being no further business, the Board adjourned to meet at call of the President.

In the matter of the purchase of showcases for Women's Building, authorized at the meeting held August 10, proposals were received from the Columbus Showcase Company, the Modern Showcase and Fixtures Company, of Columbus, and the Clark Showcase Company, of Columbus. The bid of the latter company, of \$500, was accepted. This bid was considered the best, owing to the fact that the cases were on hand and delivery was guaranteed not later than August 23. Plans and specifications of the cases accompanied the proposition.

ADMINISTRATION BUILDING, FAIR GROUNDS,
August 25, 1912.

Meeting called to order by President at 1:00 p. m.

Present: All members present excepting Messrs. McFarland and Farnsworth.

It was moved by Mr. Kilgore and seconded by Mr. Ewart that the Board order that all manure, refuse, offal and garbage be moved from the buildings and properly taken care of before 10 o'clock of each day at the Fair. Motion prevailed.

It was moved by Mr. Beidler and seconded by Mr. Ewart that no newspaper soliciting be done outside of the buildings and tents, and that no prizes be given or offered to secure newspaper subscriptions. Motion prevailed unanimously.

There being no other business, the Board adjourned.

ADMINISTRATION BUILDING,
STATE FAIR GROUNDS,
August 27, 1912.

The Board convened in session 1:00 p. m., on call of the President.

In the matter of newspaper soliciting and previous resolution in relation thereto, Tom D. Harmon, of the National Stockman and Farmer, Pittsburgh, Pa., C. W. Burkett, American Agriculturist, New York City, Clyde Waugh, Ohio Farmer, Cleveland, and Uncle Joe, of the Cincinnati Weekly Enquirer, Cincinnati, appeared and presented arguments to the Board why that part of the previous resolution prohibiting newspaper soliciting outside tents or buildings should be rescinded. They argued that they had made arrangements to have a large corps of men on the ground to solicit, and that many of these men had traveled a long distance and spent considerable money to work at the Fair, and that not having had due notice in time to save this expense, they urged the Board to rescind its order in this respect and promised to abide by the Board's judgment on all other matters.

After full discussion of the matter, Mr. Lybarger offered the follow-

ing resolution: That representatives of newspapers be permitted to solicit subscriptions, but not to offer merchandise premiums or prizes as inducements to subscribe; that books pertaining to agriculture might be offered; that each solicitor secure from the Secretary a letter of authority permitting him or her to take subscriptions upon the State Fair Grounds.

The resolution was supported by Mr. Cromley. Upon roll call it was adopted by unanimous vote.

There being no further business the meeting adjourned.

OHIO STATE FAIR GROUNDS, COLUMBUS, OHIO,

August 31, 1912, 12 o'clock, Noon.

The Ohio State Board of Agriculture convened in session at call of President Dean.

All members present excepting Mr. Beidler.

On motion of Mr. Lybarger, seconded by Mr. Cromley, Mr. Farnsworth was authorized to purchase not to exceed \$300 worth of farm products from Agricultural Hall for the purpose of making an Ohio exhibit at the American Land and Irrigation Exposition in New York and other cities. Upon roll call the motion carried unanimously.

Upon motion of Mr. Farnsworth, seconded by Mr. Cross, the Committee on Grounds and Repairs was authorized to complete the construction of an iron fence around the State Fair Grounds, and that plans be made and bids received for same. Upon roll call the motion carried unanimously.

Mr. Ganson moved, and Mr. Ewart seconded, that representatives of the Board should visit other prominent state fairs for the purpose of observing and investigating methods of management, arrangement of exhibits, classification of show animals and other articles; that each representative make written report of his visit and file the same with the Secretary, together with his expense account; that such representatives be allowed railroad expenses and \$5 per diem limit for their expense in attending such fair, and a voucher for such trip be paid after written report is filed and approved at a meeting of the Ohio State Board of Agriculture. Upon roll call all members voted aye.

Meeting adjourned.

HOLLENDEN HOTEL, CLEVELAND, OHIO,

September 16, 1912.

Pursuant to the call of Jacob Dean, President, the Ohio State Board of Agriculture convened in session to adopt suitable memorial and attend the funeral of Honorable Jacob A. Beidler, deceased member of the State Board of Agriculture.

Members present: Messrs. Dean, Cromley, Kilgore, McFarland and Farnsworth, A. P. Sandles, Secretary, and J. W. Fleming, Assistant Secretary.

The following memorial was prepared and unanimously adopted:

MEMORIAL OF THE OHIO STATE BOARD OF AGRICULTURE TO ITS DECEASED MEMBER, HON. JACOB A. BEIDLER, WHOSE DEATH OCCURRED SEPTEMBER 13, 1912.

The passing cloud makes no sound. Life's sunset and twilight come as silently and surely as does the close of day. Men always have, and always will, cross the bar and meet their pilot face to face. Birth is a miracle, and death a tragedy. Mother's song, as she bends above the cradle of her babe, finds its echo, all too soon, by the clod falling upon the coffin. Grief comes to all, gild it as we may. Sunshine always casts the shadow. No child was ever born that did not bring with it into the world, its burden of tears, pain and sadness.

By learning to love others well, we increase our sorrow, when the loved ones depart. The mystic, magic chords of friendship, may reach around the world, and down into the silence and darkness of the tomb. Death may lay hold of our companions, but the memory of old associations and true friendships clings to us still.

With deep regret and pain the members and officers of the Ohio State Board of Agriculture learned that their colleague and friend, the Hon. Jacob Beidler, was deceased. Tidings of his death brought surprise, as well as grief. Only two short weeks before, and he was in our midst, a wise counsellor in our meetings.

Since January, 1909, he had been a worthy member of our body, willing at all times to bear his portion of burden and responsibility. His large experience, his broad vision, his keenness of foresight into the affairs of the world and men, made him a valuable asset to the Ohio Department of Agriculture, and a useful member of society.

His energy and progressive spirit made him a valiant champion of the worthy cause of agriculture. His advent upon the board, was coincident with the expansion and increased scope of its work. "Uncle Jake" Beidler was big enough to see the growing importance of farm and field. Schooled, as he was, in the needs of both city and country, he was fully equipped to meet and cope with the larger problems pertinent to our department.

His genial, social, generous nature made him our friend, and we his friends, without capitulation. We, with a host of others, mourn for the vanished hand and the sound of a voice that is still.

By unanimous vote, the Ohio State Board of Agriculture, instructs its secretary to express its sympathy to the bereaved members of Mr. Beidler's family, and also to transmit a copy of this memorial to the family, and spread the same upon the records of the department.

I cannot say, I will not say,
 That he is dead, he is just away.
 With a cheery smile, and a wave of the hand,
 He has wandered into an unknown land,
 And left us wondering how very fair,
 It needs must be since he lingers there.

And you, oh you, who wildly yearn,
 For the old time step and glad return,
 Think of him faring on as dear,
 In the land of there as the land of here.
 I cannot say, I will not say,
 That he is dead. He is just away.

In a body the Board proceeded to the residence of the late Mr. Beidler, Willoughby, Ohio, and participated in the funeral ceremonies, meeting the members of the family and expressing sympathy and regrets.

There being no further business, the Board adjourned to meet at the call of the President.

OFFICE OF THE DEPARTMENT OF AGRICULTURE,
 September 20, 1912.

Committee on Buildings and Grounds met, with Messrs. Dean and Cromley present.

The bids were received and opened for the construction of disinfecting tanks at State Serum Farm, in accordance with plans and estimates made by Sanitary Engineer A. E. Kimberly, and approved by the State Board of Health, and the following bids were submitted:

Seymour Renick, Findlay, Ohio-----	\$977 00
H. E. Miller, 1197 Franklin Ave., Columbus-----	800 00
Moor Bros., 412 Stoddart Ave., Columbus-----	995 00

All bids being under the engineer's estimate of \$1,000.

Upon recommendation of Engineer Kimberly the contract was awarded to H. E. Miller, for \$800, said bid being the lowest and best.

The Secretary was authorized to contract with the Potts-Rine Company for installing pumping plant and machinery, at its bid of \$1,449.60, it being the lowest and the best bid.

In the matter of purchasing of transformers and meters necessary for electric current and light at the State Serum Farm the following bids were submitted:

The General Electric Co.-----	\$470 70
The Westinghouse Electric-----	525 55

Upon recommendation of Dawson & Holbrook, architects, the contract was awarded to the General Electric Company at \$470.70, it being the lowest and best bid.

Dawson & Holbrook, architects, were instructed to prepare plans and specifications as soon as possible for fence around grounds and race track.

No further business, the committee adjourned.

DEPARTMENT OF AGRICULTURE,
COLUMBUS, OHIO, October 16, 1912.

Pursuant to call of President Dean, State Board of Agriculture met Wednesday, 9:30 a. m., October 16. Following members responded to roll call: Messrs. Dean, Lybarger, Ganson, Ewart, Cross, Farnsworth, Cromley, McFarland and Kilgore.

Secretary read minutes of meetings of August 25th, 27th and 31st, State Fair Grounds, and meeting of Hollenden Hotel, Cleveland, September 16th. Upon motion same were approved and ordered recorded.

Upon motion of Mr. Lybarger the contractors for installation of pumping system at the Serum Farm were instructed to purchase a 25-cycle slip-ring construction meter, at an additional cost of \$87 to the contract price of \$1,449.60. Motion seconded by Mr. Cromley. Upon roll call motion unanimously carried.

Secretary read report on State Fair finances as follows: \$20,000 transferred from State Savings Bank and Trust Company to the State Treasury; still remaining on deposit at the bank, \$8,425.18, with some outstanding bills yet to be paid.

Secretary read following statement reference premium money appropriated by Board from 1908 to 1912: (See attached.)

Reference appropriation for educational exhibit, it was moved by Mr. Lybarger, seconded by Mr. Farnsworth, that the sum of \$3,000 be offered in educational premiums, and that the offer of \$1,000 from the Middle West Soil Fertility League be accepted. Motion carried.

Secretary presented bill of Windhorst & Co. for \$650 additional for one day's extra lighting of State Fair Grounds and Buildings. On motion of Mr. Lybarger, Board voted \$600 for payment of said bill.

Upon motion of Mr. McFarland, seconded by Mr. Farnsworth, it was unanimously carried that Secretary be instructed to investigate the advisability of securing electric current for light and power for the Ohio State Fair Grounds, and to ascertain if it is possible to get same from electric plant at Ohio Penitentiary. Motion carried unanimously.

In the matter of boys' corn-growing contest for 1913, it was moved by Mr. Ewart, seconded by Mr. Cromley, that same be conducted by

Ohio State Board of Agriculture, with prizes the same as for 1912. On roll call motion carried unanimously.

It was moved by Mr. Ganson, seconded by Mr. Cromley, that the Secretary be authorized to work out details of the corn boys' trip to Washington, and that he be instructed to extend to Governor Harmon invitation to honor the party with his presence. Motion carried unanimously.

In the matter of funds for Ohio's exhibit at American Land and Irrigation Congress, New York City, November 16 to December 2, it was moved by Mr. Kilgore, seconded by Mr. McFarland, that State Emergency Board be asked for sufficient funds that Ohio may be creditably represented at said congress. Motion carried unanimously.

Moved by Mr. McFarland, seconded by Mr. Ganson, that arrangements be made to dedicate Serum Farm during week of annual meeting in January. Motion carried.

Reference refund of money paid for exhibit space in Machinery Department at State Fair, it was moved by Mr. Ewart that Mr. Johnston be refunded \$5, but that in the case of Mr. McIntire refund be refused. Motion carried.

It was moved and seconded that State Fair of 1913 begin first week of September. Motion carried.

At this point Board recessed for lunch.

Board reconvened at 1 p.m., with all members present.

At this point Messrs. Ewart and Fleming presented reports of their visit to Minnesota State Fair; Messrs. McFarland, Farnsworth and Sandles reported the New York State Fair, and Messrs. Dean and Cross the Illinois State Fair. Many valuable suggestions were presented.

It was moved by Mr. Lybarger that all reports be accepted, placed on file and expenses allowed. Motion carried.

It was moved by Mr. Ganson that bond of Treasurer Kilgore, furnished at time of holding State Fair, be released. Motion carried.

Mr. Farnsworth moved that plans and specifications, as submitted by Dawson and Holbrook, architects, for fence around race track and on the north and east sides of Fair Grounds, be accepted, subject to the approval of the Building Commission, and that Secretary be instructed to advertise for bids, fence to be completed by first of June. Motion seconded by Mr. Cromley. Upon roll call all members voted aye.

Moved by Mr. Ganson that the Secretary be instructed to make formal request to the Big Four Railway officials for train service between Columbus Union Station and Ohio State Fair Grounds during future State Fairs, at intervals of not less than fifteen minutes. Seconded by Mr. Farnsworth. Motion carried.

It was moved by Mr. Ewart that Secretary and architect be in-

structed to prepare preliminary sketches and plans for a live-stock colosseum to be erected on State Fair Grounds. Motion seconded by Mr. Kilgore and unanimously carried.

Farmers' Institute Committee, composed of Messrs. Lybarger, Cross, Farnsworth and Ewart, recommended selection of following institute lecturers for season of 1912 and 1913: Frank Blackford, John Begg, J. S. Bribham, F. L. Allen, S. J. Baldwin, C. E. Beekley, E. A. Brenne-man, J. L. Buchanan, H. Burkholder, S. W. Burlingame, W. F. Cope-land, C. W. Elliott, J. F. Gordon, D. D. Harsh, R. A. Hayne, Austin Herrick, G. C. Houskeeper, J. F. Hudson, J. A. Hummon, George S. Lentz, Horatio Markley, J. C. Martindale, J. W. Nicodemus, George E. Scott, J. L. Shawver, Bert Smith, L. G. Spencer, M. C. Thomas, M. L. Tressler, H. S. Vandervort, C. R. Wagner, Wells W. Cook, H. L. Cos-grove, W. P. Elliott, H. E. Evans, C. F. Green, R. C. Knisley, W. A. Matheny, George D. Hayes and W. D. Zinn.

The committee also recommended that not more than \$42 per week and expenses be paid instructors; that the institute season begin De-cember 9th; that at each institute the state speakers deliver one address explaining the work of the Ohio State Board of Agriculture; that the Secretary be instructed to invite lecturers to Columbus to attend an instruction meeting before the opening of institutes, and that Secretary be instructed to provide lady speakers for institutes requesting such speaker, if practicable to do so.

Moved by Mr. Cromley, seconded by Mr. Kilgore, that report of Institute Committee be accepted. Motion carried unanimously.

It was moved by Mr. Ganson that Secretary Sandles be authorized to represent the Board at meeting of American Association of Institute Workers, at Atlanta, Ga., November 11. Motion carried.

No further business, Board adjourned at 4:00 p. m.

COLUMBUS, OHIO, November 26, 1912.

Pursuant to call of President Dean, Ohio State Board of Agriculture met Tuesday, November 26, 1912, 10 a. m., with the following members responding to roll call: Messrs. Dean, Ganson, Cross, Cromley, Ewart, Kilgore, Farnsworth, Lybarger and McFarland.

Secretary read minutes of Board meeting of October 16th. Same were approved by Board.

Secretary read communication from Ohio State Board of Admin-istration, reference electric current at Ohio State Fair Grounds.

In the matter of annual meeting of the Board, it was moved by Mr. Lybarger, seconded by Mr. Kilgore, that the President and Secretary prepare program for same. Motion carried.

Architect Holbrook presented preliminary plans for colosseum, 220 feet wide, 375 feet long, for Ohio State Fair Grounds.

It was moved by Mr. Cromley, seconded by Mr. Lybarger, that Legislature be asked to make appropriation of \$150,000 for erection of said live-stock colosseum. On roll call motion was carried.

At this point Board recessed until 1 o'clock for lunch.

Board reconvened for afternoon session.

Mr. S. A. Kinnear, of Columbus Public Service Commission, Mr. Thomas M. Sherman, Sixteenth Ward Councilman, Charles E. Warren, Thirteenth Ward Councilman, and F. D. Conley, Fifteenth Ward Councilman, committee representing City Council of Columbus, appeared before Board relative to use by the city of the State Fair Grounds as a public park.

Committee was informed that the question would be given due consideration by Board members.

Secretary Sandles explained arrangements for corn boys' trip to Washington, December 16 to 21.

Reference meeting of American Association of Fairs and Expositions at Chicago, beginning December 2, it was moved by Mr. Ewart, seconded by Mr. Farnsworth, that Mr. McFarland and Mr. Fleming be delegated to attend same. Motion carried.

At this point Secretary Sandles advised that Board take up and prepare budget of needed appropriations for Department for years 1913 and 1914.

On motion of Mr. Kilgore, Board went into executive session for consideration of budget, after which adjournment of Board until call of President.

DEPARTMENT OF AGRICULTURE,
COLUMBUS, OHIO, January 15, 1913.

At 12 o'clock m., as per advertised notice, State Board of Agriculture met to open and consider bids for the construction of iron fence at State Fair Grounds. Following members were present: Messrs. Cromley, Ganson, Ewart, Farnsworth, Kilgore, McFarland, Lybarger, Dean and Perkins.

Following bids were submitted:

Enterprise Foundry & Fence Co., Indianapolis, Ind.—Race track fence, lump sum, \$1,813.78; ground enclosure fence, lump sum, \$9,024.75. Total, \$10,838.53.

Martin Krumm, Columbus, Ohio—Race track fence, lump sum, \$1,933.43; ground enclosure fence, \$8,098.39. Total, \$10,000.00.

Champion Iron Co., Kenton, Ohio—Race track fence, \$1,669.44; ground enclosure fence, \$8,364.26. Total, \$10,033.70.

The Van Dorn Iron Works Co., Cleveland, Ohio—Race track fence, lump sum, \$2,573.72; ground enclosure fence, lump sum, \$9,621.65. Total, \$12,195.37.

J. S. Roof, Ashville, Ohio—Race track fence, lump sum, \$1,825.95; ground enclosure fence, lump sum, \$7,880.75. Total, \$9,706.70.

Cincinnati Iron Fence Co., Cincinnati, Ohio—Race track fence, lump sum, \$2,260.70; ground enclosure fence, lump sum, \$8,737.20. Total, \$10,997.90.

Mr. Ganson moved that no bid being within the estimate, all bids be rejected. On roll call the motion was unanimously adopted.

Mr. Lybarger moved that the Secretary be instructed to readvertise for bids on the construction of 1,739 feet, more or less, of race track fence at State Fair Grounds, and 4,000 feet, or more, of ground enclosure fencing, on State Fair Grounds. Such fence to be of Bessemer or open-hearth steel, its equal or better; such bids to be accompanied by surety bond of 50 per cent. or more of the bid, said bond to stand as final surety for completion of contract if such bid is accepted. Such bids to be accepted in whole or in part. Such fence to be completed on or before August 1, 1913. Motion was seconded by Mr. Cromley. On roll call unanimously adopted.

On motion of Mr. Cromley Board adjourned to meet on call of President.

Crop and Live Stock Statistics

AS ESTIMATED BY THE

Ohio Department of Agriculture

From Returns Received From Its Corps of Regular Township Crop and Stock Correspondents During the Year 1912.

The Division of Crop and Stock Statistics is one of the most important of this Department, having some fifteen hundred volunteer correspondents and an efficient corps of clerks to promptly compile and publish these statistics.

The chief purpose of these reports is to give the farmer information that will aid him in disposing of his crops and stock to best advantage. That this may be accomplished special advance sheets are monthly furnished the press of the State and leading agricultural journals of the country, while later the detailed report giving results by counties is issued and widely circulated.

Published herein are the monthly reports which have special reference to acreage or the total estimated production for the State. Following these reports will be found tables showing wheat and corn production from 1850 to the present year, inclusive, together with a range of prices, the average prices for each year, and the same by a series of ten years; tables showing the number of live stock in the State as returned to the Auditor of State; agricultural statistics as returned to the Secretary of Agriculture by county auditors, and ten-year comparative tables of the different crops of the State.

Official Report

OF THE

Ohio Department of Agriculture

ON

Condition of Wheat and Distribution of Live Stock March, 1912

The following report is compiled from returns received from the official correspondents of the Department:

WHEAT—Condition compared with an average----- 63 per cent.

NUMBER OF STALLIONS—

Thoroughbred runners, 67; trotters, 726; foreign bred draft, 97; American bred draft, 1093; other pure breeds, 272; unknown breeding, 667.

PURE BRED BULLS (All breeds)----- 6,130

PURE BRED BOARS (All breeds)----- 10,083

PURE BRED RAMS (All breeds)----- 13,068

PER CENT. OF DIFFERENT BREEDS OF CATTLE—

Shorthorns, 17; Aberdeen Angus, 2; Herefords, 3; Polled Durhams, 3; Jerseys, 16; Holsteins, 8; Red Polls, 2; Guernseys, 1; other pure breeds, 1; Grades, 34; Natives, 13.

PER CENT. OF DIFFERENT BREEDS OF SWINE—

Berkshires, 10; Poland Chinas, 28; Chester Whites, 19; Duroc Jerseys, 19; Yorkshires, 1; unknown, 23.

PER CENT. OF DIFFERENT GRADES OF SHEEP—

Merinos, 19; French Merinos, 2; Cotswolds, 3; Oxford Downs, 2; Shropshire Downs, 15; Hampshire Downs, 2; South Downs, 5; Lincolns, 1; Dorsets, 1. Mixed Breeds, 24; Grades, 26.

The condition of Ohio's growing wheat crop is unpromising. Late seeding, with unfavorable weather following, and the severe winter, have combined to make the outlook most discouraging. However, many fields which now appear bare should green up nicely under proper weather conditions. For the State as a whole the present growing condition of the wheat plant is estimated at 63 per cent. In comparison with the report issued by this Department January last, this is a decline of 19 per cent. On March 1, 1911, correspondents estimated wheat condition at 88 per cent. In the northeast and southeast sections of the State early-sown wheat is in fair condition. Reports are general, however, that, due to late seeding, in many fields the plant had attained but small growth at the commencement of winter. In the northwestern section of the State the fields are still covered with snow and ice, hence the impossibility of accurate estimates as to growing condition of plant. Many correspondents in this section report that at the outset of winter the plant was making little or no showing above ground. In the southwestern section of the State the plant has suffered severely, owing to freezing without proper snow protection.

NORTHEAST SECTION.

	Number of Stallions.					No. of Pure Bred Bulls, Boars, Rams.			Per Cent. of Different Breeds of Cattle.																
						Bulls (All Breeds).	Boars (All Breeds).	Rams (All Breeds).	Shorthorns.	Aberdeen-Angus.	Herefords.	Polled Durhams.	Galloways.	Jerseys.	Holsteins.	Red Polls.	Guernseys.	Ayrshires.	Devons.	Brown Swis.	Other Pure Breeds.	Grades.	Natives.		
	No.	No.	No.	No.	No.	No.	No.	No.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Ashland	8	4	8	5	2	19	40	58	356	23	1	2	5	1	18	5	23	27	12	1	1	2	27	12	
Ashabula	17	10	6	10	3	9	94	51	40	15	1	2	1	1	12	11	8	47	5	1	1	1	47	5	
Carroll	13	1	8	4	1	3	33	32	102	25	1	2	1	1	20	7	8	49	2	1	2	2	49	2	
Columbiana	11	9	9	16	2	3	88	68	103	7	1	1	1	1	20	7	1	40	12	1	1	1	40	12	
Coshocton	13	1	10	6	2	2	96	131	841	27	4	6	3	3	14	2	2	26	12	1	1	1	26	12	
Cuyahoga	13	1	2	3	3	1	14	45	30	39	4	1	1	1	14	15	1	40	20	1	1	1	40	20	
Erie	5	2	1	5	5	1	11	19	45	82	12	2	2	1	1	15	25	1	10	1	1	1	26	10	
Geauga	8	8	3	6	1	2	135	27	27	3	1	1	1	1	17	50	1	34	3	1	1	1	34	3	
Harrison	11	8	3	13	3	1	69	66	383	35	1	1	1	1	18	2	2	31	3	1	1	1	31	3	
Holmes	6	3	10	13	3	4	68	80	72	18	2	2	4	1	18	13	1	37	2	1	1	1	37	2	
Huron	8	3	15	17	13	12	17	116	86	327	13	2	8	1	10	6	1	50	7	1	1	1	50	7	
Jefferson	11	7	8	10	13	1	4	64	46	150	18	3	1	1	29	7	1	17	1	1	1	1	17	1	
Knox	18	8	18	9	1	2	72	116	553	16	1	2	3	3	16	2	1	51	5	1	1	1	51	5	
Lake	3	1	1	1	1	2	5	31	12	9	8	1	1	1	13	11	4	47	3	1	1	1	47	3	
Lorain	12	10	7	8	5	5	8	95	34	91	6	1	1	1	12	20	1	11	1	1	1	1	11	1	
Mahoning	8	11	2	5	2	1	81	35	84	10	1	2	1	3	20	16	1	30	6	1	1	1	30	6	
Medina	10	4	3	16	7	29	96	116	147	10	1	1	1	1	1	14	36	1	1	1	1	1	1	1	
Portage	14	13	6	9	4	4	119	47	105	9	1	3	4	1	17	14	1	1	2	1	1	1	1	1	
Richland	11	1	13	15	11	11	91	209	330	15	1	1	1	1	16	7	2	32	1	1	1	1	32	1	
Stark	13	6	17	11	1	7	55	73	40	12	1	1	1	1	12	20	1	45	1	1	1	1	45	1	
Summit	14	6	10	10	1	1	88	72	39	5	1	1	1	1	10	21	1	33	1	1	1	1	33	1	
Trumbull	14	9	9	14	1	1	129	42	62	6	1	1	1	1	12	20	1	40	1	1	1	1	40	1	
Tuscarawas	13	2	16	16	2	2	9	75	153	12	1	1	1	1	12	12	1	34	1	1	1	1	34	1	
Wayne	7	15	15	15	6	8	94	82	178	24	1	1	1	1	17	12	1	29	1	1	1	1	29	1	
Average per cent.	251	13	181	201	230	63	179	1,633	4,313	13	1	1	2	1	15	15	1	1	2	1	1	1	1	37	10
Totals	251	13	181	201	230	63	179	1,633	4,313	13	1	1	2	1	15	15	1	1	2	1	1	1	1	37	10

STATE AVERAGES AND TOTALS.

Average per cent.	589	67	726	327	1,033	372	667	6,130	10,063	13,068	17	2	3	3	16	8	2	1	1	1	1	1	1	1	84	13
Totals	589	67	726	327	1,033	372	667	6,130	10,063	13,068	17	2	3	3	16	8	2	1	1	1	1	1	1	1	84	13

SOUTHEAST SECTION.

	No. of Townships Reported.					Number of Stallions.					No. of Pure Bred Bulls, Boars, Rams.			Per Cent. of Different Breeds of Cattle.												
	Thoroughbred Runners.	Trotting Stock.	Foreign Bred Draft.	American Bred Draft.	Other Pure Breeds.	Unknown Breeding.	Bulls (All Breeds).	Boars (All Breeds).	Rams (All Breeds).	Short horns.	Aberdeen-Angus.	Herefords.	Polled Durhams.	Galloways.	Jerseys.	Holsteins.	Red Polls.	Guernseys.	Ayrshires.	Devons.	Brown Swiss.	Other Pure Breeds.	Grades.	Natives.		
Athens	8	1	7	17	2	4	56	42	233	39	9	2	5		20	2	1	3					4	20	4	
Belmont	14	5	5	17	2	3	88	89	363	18	3	1	2		15	10	1	3	2		1			32	21	
Fairfield	10	2	11	14	3	23	23	51	32	16	1	3	2		30	3	2	2	2					24	5	
Gallia	9	9	12	12	3	2	60	46	94	25	2	11	1		18	1	1	3	2	2	1			22	8	
Guernsey	15	1	9	12	2	4	96	62	281	26	7	3	3		20	1	1	1	1	2				29	8	
Hocking	6	3	4	9	2	4	25	56	62	29	3	3	3		1	2	2	1	1					13	29	
Jackson	9	1	3	4	2	4	37	41	94	12	3	7	1		14	4	3	2	2					30	30	
Lawrence	4	4	4	4		2	13	22	7	12	9	1	4		15	4	4	4	4					16	37	
Licking	21	2	18	18	2	3	144	170	449	20	3	2	2		23	2	2	2	2	1				32	7	
Meigs	10	5	12	8	4	5	50	30	113	14	3	5	4		16	9	3	1	1					46	9	
Monroe	10		3	5	3	11	44	38	83	13	4	8	4		15	2	2	1	1					32	7	
Morgan	10	2	5	7	5	6	67	44	272	25	1	14	2		16	9	1	1	1					2	46	
Muskingum	19	2	1	11	5	6	108	97	300	31	2	6	4		11	6	1	1	2					18	27	
Noble	5	8	1	8	3	20	23	30	190	20	11	11	2		15	2	1	1	6					34	6	
Perry	14	8	10	24	4	6	110	81	123	19	5	1	4		8	2	4	4	1					31	2	
Vinton	5	2	1	2	2	3	12	11	18	34	2	7	1		17	2	10	1	4					31	16	
Washington	13	1	8	6	2	2	86	71	202	9					12	2	1	1						36	4	
Average per cent.	182	63	106	152	33	124	1,042	981	2,516	21	4	5	2		16	3	2	2	1						29	14
Totals																										

STATE AVERAGES AND TOTALS.

Average per cent.	859	756	927	1,098	372	667	10,083	13,068	17	2	3	3	16	8	2	1	...	...	...	1	34	13
Totals	859	756	927	1,098	372	667	10,083	13,068	17	2	3	3	16	8	2	1	...	...	...	1	34	13

SOUTHEAST SECTION—Concluded.

Per Cent. of Different Breeds of Swine.												Per Cent. of Different Breeds of Sheep.																													
Poland Chinas.				Chester Whites.		Duroc Jerseys.		Yorkshires.		Hampshires.		Tamworths.		Unknown.		Merinos.		French Merinos.		Cotswolds.		Oxford Downs.		Shropshire Downs.		Hampshire Downs.		South Downs.		Lincolns.		Dorsets.		Cheviots.		Mixed Bloods.		Grades.		Wheat Condition at Present.	
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%		
8	32	44	6	1	1	1	10	57	3	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
10	31	30	17	2	1	1	20	64	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
14	33	17	17	2	1	1	17	15	1	4	1	21	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
7	34	20	5	1	1	1	32	11	2	1	1	20	4	2	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
13	36	24	10	1	1	2	16	45	2	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
7	25	21	12	1	1	1	33	36	1	3	1	6	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
1	35	23	24	1	1	1	17	15	1	1	1	12	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
3	31	22	8	1	1	1	30	22	2	2	3	13	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
18	37	22	12	2	2	2	9	36	2	2	3	13	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11	28	36	9	3	1	1	13	29	1	2	3	9	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
9	36	27	4	1	1	1	23	35	1	2	3	1	8	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
6	42	37	3	1	1	1	12	40	3	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
19	34	21	6	1	1	1	19	51	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
6	45	20	13	1	1	1	16	37	16	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
21	26	13	13	1	1	1	26	28	2	3	2	5	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
2	41	34	13	1	1	1	1	53	4	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
1	23	35	2	1	1	1	39	18	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Average per cent.	9	34	26	10	1	1	20	34	3	1	1	8	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Totals	9	34	26	10	1	1	20	34	3	1	1	8	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		

STATE AVERAGES AND TOTALS.

Average per cent.	10	28	19	19	1	1	23	19	2	3	2	15	2	5	1	1	1	24	26	63	%
Totals	10	28	19	19	1	1	23	19	2	3	2	15	2	5	1	1	1	24	26	63	%

NORTHWEST SECTION.

	Number of Stallions.					No. of Pure Bred Bulls, Boars, Rams.			Per Cent. of Different Breeds of Cattle.																
	Thoroughbred Runners.	Trotting Stock.	Foreign Bred Draft.	American Bred Draft.	Other Pure Breeds.	Unknown Breeding.	Bulls (All Breeds).	Boars (All Breeds).	Rams (All Breeds).	Shorthorns.	Aberdeen-Angus.	Herefords.	Polled Durhams.	Galloways.	Jerseys.	Holsteins.	Red Polls.	Guernseys.	Ayrshires.	Devons.	Brown Swiss.	Other Pure Breeds.	Grades.	Natives.	
Allen	9	2	2	10	3	1	12	345	305	9	2	4	1	1	16	4	7	1	1	1	1	1	53	23	5
Anglake	9	1	24	33	30	14	10	97	290	13	4	3	2	2	14	3	4	4	1	1	1	1	35	14	14
Champaign	12	17	17	20	28	7	7	180	491	20	3	1	1	1	30	2	1	1	1	1	1	1	30	22	22
Crawford	17	9	15	21	21	23	11	99	214	53	16	1	1	1	19	6	2	1	1	1	1	1	40	19	16
Darke	13	6	9	15	21	5	7	81	151	138	15	1	1	1	19	6	2	1	1	1	1	1	41	19	13
Defiance	12	21	11	21	21	9	4	125	190	234	8	1	2	1	27	4	3	2	1	1	1	1	41	19	13
Delaware	15	18	21	36	21	4	4	125	190	234	8	1	2	1	27	4	3	2	1	1	1	1	41	19	13
Delaware	7	7	15	17	6	1	1	112	158	87	4	1	1	1	6	17	4	3	1	1	1	1	59	13	5
Fulton	8	1	16	10	13	1	1	107	267	241	10	6	1	1	7	2	1	1	1	1	1	1	59	13	5
Hancock	8	1	16	10	13	1	1	107	267	241	10	6	1	1	7	2	1	1	1	1	1	1	59	13	5
Hardin	9	8	10	13	6	9	36	118	80	19	19	1	1	1	7	4	1	1	1	1	1	1	59	13	5
Henry	9	5	12	11	2	8	55	101	40	10	10	1	1	1	7	4	1	1	1	1	1	1	59	13	5
Logan	12	13	10	17	3	3	61	134	232	21	1	1	1	1	21	3	4	1	1	1	1	1	59	13	5
Lucas	8	1	6	2	...	...	28	52	24	3	3	3	3	3	21	11	2	2	2	5	1	1	35	14	14
Marion	10	12	19	21	...	...	77	260	252	19	3	3	3	3	21	11	2	2	2	5	1	1	35	14	14
Mercer	10	11	27	10	1	1	75	127	80	20	...	3	3	3	21	11	2	2	2	5	1	1	35	14	14
Morrow	12	1	19	25	25	3	2	66	120	285	22	2	2	2	20	5	1	1	1	1	1	1	35	14	14
Ottawa	5	2	2	9	...	...	14	18	14	1	1	1	1	1	20	5	1	1	1	1	1	1	35	14	14
Paulding	10	2	14	22	9	15	26	79	43	11	2	2	2	2	20	5	1	1	1	1	1	1	35	14	14
Putnam	9	15	22	50	9	9	91	175	125	25	4	2	3	3	12	6	6	1	1	1	1	1	35	14	14
Sandusky	9	3	16	9	1	5	68	184	91	28	3	4	4	4	12	7	1	1	1	1	1	1	35	14	14
Seneca	11	9	12	19	5	3	115	185	140	21	1	2	2	2	18	7	1	1	1	1	1	1	35	14	14
Shelby	8	10	18	13	3	6	69	132	83	27	1	2	2	2	23	9	3	2	1	1	1	1	35	14	14
Union	8	8	23	8	1	8	49	147	175	25	2	2	2	2	23	9	3	2	1	1	1	1	35	14	14
Van Wert	9	2	4	35	21	7	63	175	135	21	2	2	2	2	9	5	3	1	1	1	1	1	35	14	14
Williams	5	1	1	2	7	5	51	70	15	15	3	3	3	3	16	10	1	1	1	1	1	1	35	14	14
Wood	12	6	16	13	6	9	69	86	52	23	3	3	3	3	14	5	2	1	1	1	1	1	35	14	14
Wyandot	10	9	16	8	2	1	68	132	225	23	3	3	3	3	14	5	2	1	1	1	1	1	35	14	14
Average per cent.	12	228	432	450	100	162	1,932	4,505	4,236	16	2	2	3	3	14	6	2	1	1	1	1	1	37	15	15
Totals	265	228	432	450	100	162	1,932	4,505	4,236	16	2	2	3	3	14	6	2	1	1	1	1	1	37	15	15

STATE AVERAGES AND TOTALS.

Average per cent.	889	67	726	927	1,093	272	667	6,130	10,083	13,068	17	2	3	3	16	8	2	1	1	1	1	1	34	13
Totals	889	67	726	927	1,093	272	667	6,130	10,083	13,068	17	2	3	3	16	8	2	1	1	1	1	1	34	13

NORTHWEST SECTION—Concluded.

Per Cent. of Different Breeds of Swine.										Per Cent. of Different Breeds of Sheep.										
Berkshires.	Poland Chinas.	Chester Whites.	Duroc Jerseys.	Yorkshires.	Hampshires.	Tamworths.	Unknown.	Merinos.	French Merinos.	Cotswolds.	Oxford Downs.	Shropshire Downs.	Hampshire Downs.	South Downs.	Lincolns.	Dorsets.	Cheviots.	Mixed Bloods.	Grades.	Wheat Condition at Present.
%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Allen.....	29	8	20	...	...	1	34	16	2	4	1	15	2	...	1	...	...	15	44	75
Auglaize.....	19	28	28	...	...	...	42	6	3	1	1	27	4	...	...	...	...	22	35	71
Champaign.....	9	24	16	2	1	2	15	8	13	4	1	17	4	1	1	...	...	28	31	77
Crawford.....	6	24	26	2	1	...	25	17	1	4	2	23	1	1	...	...	...	20	33	57
Darke.....	4	36	17	23	1	...	19	1	...	3	9	27	2	6	6	...	...	32	17	66
Defiance.....	12	30	19	23	...	...	16	12	...	1	6	31	6	...	...	...	...	22	13	55
Delaware.....	7	26	16	23	1	3	23	35	1	1	3	12	2	1	1	2	...	27	14	62
Delaware.....	12	18	20	20	...	...	30	6	1	1	6	19	...	...	...	...	...	40	34	53
Fulton.....	5	32	13	20	...	...	30	7	3	...	...	20	...	1	1	...	...	39	30	80
Hancock.....	4	37	9	27	...	...	21	17	6	7	...	19	...	...	2	...	...	10	38	75
Hardin.....	5	17	10	12	...	...	45	1	...	...	...	16	3	4	...	...	...	39	32	58
Henry.....	6	30	18	20	2	3	19	29	6	3	1	10	...	...	4	1	...	22	21	74
Logan.....	8	26	19	27	...	...	18	1	...	...	4	12	20	3	...	...	...	21	35	45
Lucas.....	10	33	15	31	1	...	12	16	2	4	1	20	4	1	4	...	...	28	20	61
Marion.....	6	28	19	42	...	...	14	1	...	2	1	31	1	1	...	...	...	35	28	81
Mercer.....	10	33	25	14	...	...	18	34	4	4	1	6	1	2	1	1	...	19	27	65
Morrow.....	7	14	24	18	2	...	34	8	1	4	1	12	...	...	...	...	...	65	9	73
Ottawa.....	7	27	10	25	1	...	30	3	...	...	...	1	...	...	...	...	...	42	35	44
Paulding.....	11	28	16	32	1	1	11	9	1	5	1	11	3	11	...	1	...	11	33	56
Putnam.....	6	38	14	27	...	...	15	11	...	8	9	7	19	...	...	...	...	13	39	54
Sandusky.....	9	34	18	18	1	...	20	16	...	3	5	15	4	3	...	2	...	23	20	61
Seneca.....	4	26	18	41	3	...	6	18	1	6	2	29	3	2	...	...	...	24	11	75
Shelby.....	8	34	16	35	...	...	2	7	4	2	3	32	1	5	...	...	...	21	22	81
Union.....	11	21	10	26	...	...	31	9	1	2	2	18	...	4	3	...	...	14	18	56
Van Wert.....	8	36	20	17	4	1	16	8	...	...	5	22	1	4	...	...	...	24	44	80
Williams.....	14	31	20	17	...	...	18	8	...	6	3	43	...	...	...	...	...	14	18	56
Wood.....	12	24	1	1	...	...	25	19	1	3	2	20	1	4	2	1	...	33	22	49
Wyandot.....	8	33	15	18	1	...	25	19	1	...	2	18	1	...	...	...	1	26	35	70
Average per cent.....	8	28	15	24	1	1	22	12	2	3	3	20	2	2	1	1	1	27	27	65
Totals.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

STATE AVERAGES AND TOTALS.

Average per cent.	10	28	19	19	1	...	23	19	2	3	2	15	2	5	1	1	1	24	26	63
Totals .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

SOUTHWEST SECTION.

	Number of Stallions.						No. of Pure Bred Bulls, Boars, Rams.			Per Cent. of Different Breeds of Cattle.															
	Number of Stallions.						No. of Pure Bred Bulls, Boars, Rams.			Shortorns.	Aberdeen-Angus.	Herefords.	Polled Durhams.	Galloways.	Jerseys.	Holsteins.	Red Polls.	Guernseys.	Ayrshires.	Devons.	Brown Swiss.	Other Pure Breeds.	Grades.	Natives.	
	Thoroughbred Runners.	Trotting Stock.	Foreign Bred	American Bred	Other Pure Breeds.	Unknown Breed- ing.	Bulls (All Breeds).	Boars (All Breeds).	Rams (All Breeds).																
No. of Townships Reported.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Adams	11	9	8	11	6	8	33	40	30	19	2	2	3	1	15	1	1	1	1	1	1	1	4	27	18
Brown	11	13	6	15	3	8	53	104	67	16	1	1	2	1	1	4	4	4	1	1	1	1	30	30	10
Butler	10	12	10	17	6	7	69	246	108	17	2	2	5	1	1	5	5	4	1	1	1	1	2	20	23
Clark	16	12	10	17	12	12	42	92	115	12	5	1	2	1	25	5	5	2	1	1	1	1	5	27	15
Clermont	13	10	7	12	3	12	63	113	81	9	1	1	2	2	27	7	9	1	2	1	1	1	2	31	9
Clinton	14	25	18	18	4	13	109	375	213	22	1	5	1	1	27	7	1	1	1	1	1	1	3	31	9
Fayette	8	2	30	18	14	2	53	248	129	24	7	2	3	1	1	18	1	1	1	1	1	1	2	32	8
Franklin	14	8	17	11	2	7	77	123	103	13	2	2	3	1	3	11	3	1	1	1	1	1	1	23	17
Greene	5	3	19	10	16	1	66	95	62	24	10	2	3	1	31	3	1	1	1	1	1	1	1	32	8
Hamilton	8	5	9	4	9	1	43	74	23	3	4	1	1	1	17	4	1	1	1	1	1	1	1	48	12
Highland	12	17	12	17	8	26	79	188	94	15	1	1	1	1	1	1	1	1	1	1	1	1	1	45	15
Madison	10	19	10	23	5	10	71	180	140	32	2	3	3	1	14	1	1	1	1	1	1	1	1	23	9
Miami	6	5	5	9	2	10	25	36	21	9	1	3	3	3	17	1	1	1	1	1	1	1	1	23	29
Montgomery	6	4	3	15	4	13	51	91	33	8	1	3	3	3	23	6	5	2	2	2	2	2	38	11	
Pickaway	13	21	23	22	4	14	127	302	79	31	1	3	2	2	10	1	1	1	1	1	1	1	9	37	13
Pike	6	2	7	8	3	16	17	35	43	13	3	2	2	2	16	1	1	1	1	1	1	1	1	38	13
Preble	7	7	2	12	2	3	42	175	57	14	1	2	5	2	20	3	4	4	1	1	1	1	1	19	11
Ross	13	1	16	9	13	3	92	228	142	32	1	8	2	2	15	5	4	4	1	1	1	1	1	18	32
Scioto	10	1	1	2	2	8	45	55	18	12	1	2	4	1	27	2	2	2	1	1	1	1	1	19	11
Scloto	8	13	10	16	19	18	70	164	65	16	1	1	1	1	22	7	1	1	1	1	1	1	1	33	17
Warren	8	13	10	16	19	18	70	164	65	16	1	1	1	1	22	7	1	1	1	1	1	1	1	33	17
Average per cent.	34	254	188	261	76	202	1,227	2,964	1,603	17	2	2	3	1	20	4	2	1	1	1	1	1	2	30	16
Totals	191	254	188	261	76	202	1,227	2,964	1,603	17	2	2	3	1	20	4	2	1	1	1	1	1	2	30	16

STATE AVERAGES AND TOTALS.

Average per cent.	889	726	927	1,093	272	667	6,130	10,083	13,068	17	2	3	3	16	8	2	1	1	1	1	1	1	1	34	13
Totals	889	726	927	1,093	272	667	6,130	10,083	13,068	17	2	3	3	16	8	2	1	1	1	1	1	1	1	34	13

SOUTHWEST SECTION—Concluded.

	Per Cent. of Different Breeds of Swine.							Per Cent. of Different Breeds of Sheep.											Wheat Condition at Present.			
	Berkshires.	Poland Chinas.	Chester Whites.	Duroc Jerseys.	Yorkshires.	Hampshires.	Tamworths.	Unknown.	Merinos.	French Merinos.	Colswolds.	Oxford Downs.	Shropshire Downs.	Hampshire Downs.	South Downs.	Lincolns.	Dorsets.	Cheviots.		Mixed Bloods.	Grades.	%
Adams	7	33	16	15	...	...	...	29	20	7	9	9	6	...	10	...	...	...	...	27	12	68
Brown	7	39	10	27	...	2	...	15	13	8	3	3	13	2	13	...	...	...	...	35	15	51
Butler	7	30	11	30	...	...	...	22	1	...	5	3	13	1	17	2	...	...	...	48	9	61
Clark	1	13	13	38	1	3	...	32	13	1	...	...	30	...	4	...	1	...	...	14	35	55
Clermont	4	33	10	28	...	...	...	25	13	...	12	7	4	...	12	...	...	...	...	24	24	44
Clinton	9	37	9	30	...	...	...	29	31	3	...	2	9	1	2	...	...	...	...	24	24	44
Fayette	6	25	5	37	1	2	...	21	15	...	...	2	22	1	8	1	2	...	...	11	25	55
Franklin	13	33	12	41	2	1	1	17	19	3	...	4	11	2	6	...	...	...	...	26	17	65
Greene	7	23	10	27	2	1	...	19	27	...	5	4	22	1	3	2	1	...	...	38	1	59
Hamilton	6	29	22	24	...	...	...	33	7	1	...	6	28	...	13	...	15	...	...	20	21	69
Highland	9	25	7	28	...	1	...	1	...	...	...	...	10	1	10	...	...	...	...	44	19	58
Madison	2	30	3	42	...	...	1	12	20	...	1	...	27	...	2	...	1	...	...	35	14	65
Miami	8	27	28	28	...	...	...	16	...	...	10	3	35	10	3	...	...	...	...	17	22	72
Montgomery	8	24	...	...	...	...	...	24	20	...	...	3	30	...	3	...	6	...	...	16	22	59
Pickaway	5	39	7	20	...	1	...	32	2	2	...	2	9	...	8	...	...	7	...	16	18	55
Pike	5	30	5	25	1	1	...	32	2	2	8	2	9	...	1	...	1	...	...	29	38	66
Preble	2	16	16	41	1	1	...	23	...	...	6	14	18	3	13	2	...	...	...	21	23	62
Ross	12	40	7	29	...	...	...	12	32	1	...	1	15	1	10	1	...	...	...	20	17	61
Scioto	11	33	14	12	...	...	...	25	...	...	18	...	8	...	17	...	...	...	...	60	...	64
Warren	3	34	9	28	1	...	...	25	11	1	2	4	8	2	13	1	...	...	...	26	32	43
Average per cent.	6	30	11	29	1	1	...	22	13	2	5	3	17	2	9	1	2	...	...	27	19	60
Totals .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

STATE AVERAGES AND TOTALS.

Average per cent.....	10	28	19	19	1	.....	.....	23	19	2	3	2	15	2	5	1	1	.....	24	26	63
Totals .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Official Report

OF THE

Ohio Department of Agriculture

ON THE

Condition of Crops and Area of Oats, May 1, 1912

The following report, reference to wheat, fruit and other crops, is compiled from returns received from official correspondents of this Department:

WHEAT—Condition compared with average.....	44 per cent.
OATS—Area for 1911 as returned by township assessors.....	1,460,312 acres
OATS—Area sown this year compared with 1911.....	128 per cent.
OATS—Estimated area for the harvest of 1912.....	1,877,921 acres
SPRING BARLEY—Area sown compared with last year.....	97 per cent.
WINTER BARLEY—Condition compared with average.....	67 per cent.
BARLEY—Total area:	
—Sown last fall.....	21 per cent.
—Sown this spring.....	79 per cent.
RYE—Condition compared with average.....	75 per cent.
CLOVER—Average date of seeding.....	March 30
CLOVER—Acreage sown compared with last year.....	83 per cent.
FRUIT—Prospect compared with normal yield.....	71 per cent.
BERRIES—Prospect compared with normal yield.....	81 per cent.
LIVE STOCK—Losses during winter and spring:	
—Horses	2 per cent.
—Cattle	2 per cent.
—Sheep	3 per cent.
—Hogs	4 per cent.

AVERAGE PRICES.

Wheat	\$1 07 per bu.
Corn	79 per bu.
Barley	94 per bu.
Oats	60 per bu.
Rye	89 per bu.
Potatoes	1 60 per bu.
Hay	25 00 per ton

Ohio's 1912 wheat harvest will be a failure. Not only is the growing plant in poor condition, but a large acreage of the original area seeded has been abandoned. This will necessarily further reduce the production. We quote no figures reference to the abandoned area, but from corre-

spondents' notes, no doubt it has been such as to seriously affect the harvest. Generally, early-sown wheat is reported in fair condition. The exception is the northwest section of the State. In this section little or no wheat remains, and that growing is in exceedingly poor condition. The present condition of the growing wheat plant for the State as a whole is estimated at 44 per cent. compared with an average. This is a decline in condition of 17 per cent. since issuance of report one month ago. Conditions by State sections follow: northeast, 49 per cent.; southeast, 72 per cent.; northwest, 20 per cent.; southwest, 44 per cent. No material damage by Hessian fly or other insects reported.

The oats area shows a large increase compared with acreage sown last year. This is due principally to failure of wheat. Reports from township assessors show that in 1911 the oats area was 1,406,312 acres. In the present report the official correspondents of this Department estimate that 1,877,921 acres have been sown for coming harvest.

Growing conditions of rye estimated at 75 per cent., compared with an average.

Fruit prospect has increased since last report.

The present estimate is 71 per cent., compared with a normal yield, as against 67 per cent., reported one month ago.

No reports of unusual losses to live stock during winter and spring.

NORTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Reports Received.	Wheat.			Oats.			Spring Barley.	Winter Barley.		Barley.		Rye.
		Condition Compared With Standard Av.	Damage by Hessian Fly.	Damage by Other Insects.	Area for 1911 as Returned by Township Assessor.	Acres.	Per Cent.	Area Sown Compared With Last Year.	Condition Compared With Standard Av.	Per Cent.	Per Cent. Sown Last Fall.	Per Cent. Sown This Spring.	Condition Compared With Standard Av.
	Number.	Per Cent.	Per Cent.	Per Cent.		Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Ashland	9	33	1	1	19,053	123	123	84	70	50	50	50	82
Ashtabula	15	78	1	1	26,413	89	89	100	75	100	100	100	87
Carroll	10	60	2	1	13,584	105	105	100	75	100	100	100	75
Columbiana	11	60	1	1	19,127	100	100	100	75	100	100	100	76
Coshocton	17	50	3	1	11,460	114	114	100	100	50	50	50	78
Cuyahoga	12	57	1	1	10,791	114	114	100	100	100	100	100	69
Erie	9	28	1	1	14,365	122	122	114	50	10	10	90	51
Geauga	13	75	9	8	16,100	103	103	100	80	5	5	95	81
Harrison	15	56	1	2	8,176	102	102	100	70	3	3	97	67
Holmes	10	50	6	1	18,308	100	100	100	70	3	3	97	74
Huron	19	35	1	1	29,820	103	103	92	65	50	50	50	64
Jefferson	11	71	4	1	10,998	101	101	100	100	100	100	100	87
Knox	20	40	1	1	8,768	105	105	100	100	100	100	100	85
Lake	5	69	1	1	8,580	93	93	100	100	100	100	100	81
Lorain	12	40	1	4	22,444	124	124	82	100	30	30	70	48
Mahoning	12	59	4	4	15,041	105	105	100	100	100	100	100	66
Medina	13	28	1	1	21,406	131	131	125	100	100	100	100	44
Portage	18	53	1	1	22,019	109	109	100	100	100	100	100	82
Richland	15	29	5	6	24,118	115	115	100	50	50	50	50	44
Stark	18	41	6	1	31,785	101	101	100	100	100	100	100	68
Summit	18	34	4	1	19,058	111	111	101	100	100	100	100	74
Tumbull	18	51	2	1	20,971	99	99	100	100	100	100	100	63
Tuscarawas	16	51	1	1	18,283	105	105	100	100	100	100	100	73
Wayne	14	13	1	1	27,163	129	129	100	90	100	100	100	69
Averages	330	49	2	2	437,816	109	109	100	75	17	17	83	70
Totals	330	49	2	2	437,816	109	109	100	75	17	17	83	70

NORTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Clover.		Fruit.		Berries.	Live Stock Losses During Winter and Spring.				Price Per Bushel.					Price Per Ton.	
	Average Date of Seeding March 1.	Acreage Sown With Last Year.	Per Cent.	Prospect Com-pared With Normal Yield.	Per Cent.	Horses.	Cattle.	Sheep.	Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.
	Days.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Ton.
Ashland	34	73	69	78	3	1	3	5	5	\$1 11	\$0 78	\$0 90	\$0 59	\$0 82	\$1 31	\$23 00
Ashtabula	40	92	71	95	1	1	1	1	1	1 04	81	83	58	84	1 21	21 50
Carroll	31	92	66	80	1	1	1	3	1	1 07	81	83	59	87	1 54	23 00
Columbiana	26	90	80	89	1	1	1	3	2	1 05	79	83	59	87	1 42	23 00
Coshocton	29	83	67	82	1	2	1	4	2	1 08	80	70	63	80	1 42	24 00
Cuyahoga	44	96	80	79	1	2	1	2	2	1 13	86	1 25	60	94	1 96	27 00
Erie	41	82	58	74	1	2	1	2	4	1 10	77	1 10	62	82	1 33	27 00
Geauga	36	92	73	91	1	2	2	2	1	1 08	78	88	62	94	1 28	29 00
Harrison	32	83	66	86	1	2	1	3	3	1 02	81	90	63	97	1 91	24 69
Holmes	29	91	74	85	2	2	2	3	6	1 09	78	90	53	86	1 37	23 80
Huron	34	82	69	74	2	2	2	4	2	1 12	78	96	57	83	1 21	25 31
Jefferson	18	88	73	74	1	2	1	3	3	1 03	81	81	63	99	1 69	27 30
Knox	27	87	65	84	1	2	1	2	4	1 09	79	75	63	95	1 53	22 70
Lake	37	76	56	82	1	3	2	2	5	1 09	76	75	61	91	1 20	23 00
Lorain	29	63	67	79	2	2	2	2	2	1 12	78	1 20	60	95	1 35	26 33
Mahoning	35	87	73	83	3	2	1	2	2	1 04	80	1 25	63	93	1 40	24 42
Medina	39	60	53	82	1	2	1	3	2	1 11	75	1 25	56	1 00	1 17	23 60
Portage	41	87	78	85	2	2	2	2	2	1 10	73	88	61	95	1 28	22 50
Richland	84	87	62	85	2	2	2	4	2	1 09	78	60	36	81	1 34	23 54
Stark	34	86	52	69	1	2	1	2	2	1 11	79	1 25	58	95	1 41	23 53
Summit	36	77	67	83	2	1	2	2	2	1 12	81	1 25	60	96	1 47	24 59
Tuscarawas	37	84	65	80	2	2	2	2	2	1 08	82	82	63	91	1 32	21 67
Trumbull	32	87	65	80	2	2	2	2	2	1 07	78	82	56	91	1 58	24 43
Wayne	39	73	70	87	3	2	3	4	4	1 12	69	1 01	54	87	1 22	22 21
Averages	April 4	83	67	82	2	2	2	3	3	\$1 09	\$0 79	\$0 97	\$0 60	\$0 91	\$1 39	\$24 11
Totals	April 4	83	67	82	2	2	2	3	3	\$1 09	\$0 79	\$0 97	\$0 60	\$0 91	\$1 39	\$24 11

SOUTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912,
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Reports Received.	Wheat.		Oats.	Spring Barley.	Winter Barley.	Barley.		Rye.							
		Condition Compared With Standard Average.	Damage by Hessian Fly.				Damage by Other Insects.	Area for 1911 as Returned by Township Assessor.		Acres.	Per Cent.	Acres.	Per Cent.	Per Cent. Sown Last Fall.	Per Cent. This Spring.	Condition Compared With Standard Average.
Number.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Athens	9	73	2	.....	.....	.....	2,799	96	2,687	.....	.....	.....	.....	.....	.....	84
Belmont	18	63	2	.....	.....	.....	10,787	99	10,679	.....	.....	.....	.....	.....	.....	84
Fairfield	11	60	3	.....	.....	4	2,956	104	3,074	.....	.....	.....	.....	.....	.....	89
Gallia	8	70	1	.....	.....	.....	3,407	89	3,032	.....	.....	.....	.....	.....	.....	71
Guernsey	16	67	2	.....	.....	.....	6,045	101	6,105	.....	.....	.....	.....	.....	.....	86
Hocking	6	70	6	.....	.....	.....	1,924	92	1,770	.....	.....	.....	.....	.....	.....	92
Jackson	11	77	1	.....	.....	.....	1,870	82	1,533	.....	.....	.....	.....	.....	.....	79
Lawrence	12	84	1	.....	.....	.....	4,472	89	3,980	.....	.....	.....	.....	.....	.....	94
Licking	23	61	2	.....	.....	.....	7,758	101	7,836	.....	.....	.....	.....	.....	.....	77
Meigs	15	87	1	.....	.....	.....	2,694	106	2,856	.....	.....	.....	.....	.....	.....	84
Monroe	9	78	1	.....	.....	.....	8,082	98	7,759	.....	.....	.....	.....	.....	.....	84
Morgan	14	91	2	.....	.....	.....	3,004	94	2,824	.....	.....	.....	.....	.....	.....	84
Muskingum	22	58	1	.....	.....	.....	5,699	91	5,186	.....	.....	.....	.....	.....	.....	70
Noble	15	72	2	.....	.....	.....	3,841	99	3,308	.....	.....	.....	.....	.....	.....	79
Perry	17	59	1	.....	.....	.....	2,498	99	2,473	.....	.....	.....	.....	.....	.....	70
Vinton	8	86	.....	.....	.....	.....	2,330	101	2,353	.....	.....	.....	.....	.....	.....	77
Washington	15	70	.....	.....	.....	.....	6,679	93	6,211	.....	.....	.....	.....	.....	.....	86
Averages	.....	72	2	.....	.....	.....	76,345	96	73,666	.....	.....	.....	.....	.....	.....	82
Totals	289	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	23	87	6	.....	.....	.....	10,787	106	10,679	.....	.....	.....	.....	.....	.....	94
Minimum	6	58	1	.....	.....	.....	1,870	82	1,533	.....	.....	.....	.....	.....	.....	70

SOUTHEAST SECTION—Concluded.

2 OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Clover.		Fruit.	Berries.	Live Stock Losses During Winter and Spring.				Price per Bushel.					Price Per Ton.		
	Average Date of Seeding March 1.	Acreage Sown Compared With Last Year.	Prospect Compared With Normal Yield.	Prospect Compared With Normal Yield.	Horses.	Cattle.	Sheep.	Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	
			Per Cent.	Per Cent.												Per Cent.
Athens	21	83	99	101	2	1	3	8	\$1 01	\$0 86	...	\$0 85	\$0 95	...	\$1 76	\$26 00
Belmont	26	83	83	88	2	2	3	1	1 00	86	...	86	88	...	1 90	27 00
Fairfield	23	87	68	82	3	2	4	3	1 08	78	...	78	75	...	1 73	24 00
Gallia	11	67	97	92	3	2	4	3	1 04	85	...	85	88	...	1 71	29 00
Guernsey	23	86	69	79	4	4	4	2	1 01	90	...	90	95	...	2 00	26 70
Hocking	21	72	59	72	3	4	5	2	1 04	82	...	82	70	...	1 93	26 50
Jackson	20	82	83	81	2	2	4	1	1 10	84	...	84	85	...	1 74	26 80
Lawrence	22	60	103	94	2	1	3	1	1 05	89	...	89	97	...	1 67	29 67
Licking	30	81	79	82	2	2	2	2	1 06	84	...	84	80	...	1 72	25 00
Melgs	24	75	102	87	4	2	3	...	1 02	84	...	84	80	...	1 77	26 89
Monroe	28	71	90	97	3	3	3	4	1 01	89	...	89	91	...	1 97	28 00
Morgan	22	88	104	98	5	2	4	4	1 00	87	...	87	94	...	1 93	25 00
Muskingum	24	79	90	94	3	3	3	1	1 05	86	...	86	94	...	1 76	27 45
Noble	12	89	87	88	2	1	5	2	1 03	85	...	85	83	...	1 90	25 07
Perry	22	74	74	72	2	2	3	2	1 03	89	...	89	77	...	1 74	25 56
Vinton	11	64	92	89	3	1	3	3	1 01	83	...	83	68	...	1 73	24 50
Washington	16	79	96	82	3	1	4	3	1 05	92	...	92	68	...	1 86	27 00
Averages	Mch. 1	78	87	87	3	2	4	2	\$1 03	\$0 85	\$0 75	\$0 66	\$0 95	\$1 82	\$26 46	
Totals																
Maximum	30	87	104	101	5	4	5	8	1 10	92	95	85	1 18	2 00	29 27	
Minimum	11	60	59	72	1	1	1	1	98	73	50	57	75	1 67	24 00	

SOUTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Reports Received.	Wheat.		Oats.		Spring Barley.	Barley.		Rye.
		Condition Compared With Average.	Damage by Hessian Fly.	Damage by Other Insects.	Area for 1911 as Returned by Township Assessor.	Acres.	Per Cent.	Condition Compared With Average.	
	Number.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Athens	9	73			2,799	96			84
Belmont	18	63	2		10,787	99	10		84
Fairfield	11	60	2		2,956	104		90	89
Gallia	8	70	1	4	3,407	89			71
Guernsey	16	67	2	2	3,032	101			86
Hocking	16	70	6	4	6,045	92	100	100	92
Jackson	11	77	1	3	1,924	82			79
Licking	12	84	1	1	1,870	89		50	94
Lawrence	23	61	2	1	4,472	101			77
Meigs	15	87	1		7,758	106		100	84
Monroe	9	78	1	1	2,694	96	50		84
Morgan	14	91	2		8,082	94			84
Muskingum	22	58	1		3,004	91			79
Noble	15	72	2	1	5,690	99		10	70
Perry	17	59	1	1	3,241	99	100		77
Vinton	8	86		2	2,498	101			86
Washington	15	70	1	1	2,330	93			
Averages		72	2	1	6,679	96			82
Totals	289				76,345		83	25	75
Maximum	23	87	6	4	10,787	106	100	90	94
Minimum	6	58	1	1	1,370	82	50	10	20

SOUTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Clover.		Fruit.	Berries.	Live Stock Losses During Winter and Spring.				Price per Bushel.					Price Per Ton.	
	Average Date of Seeding March 1.	Acreage Sown With Last Year.	Prospect Compared With Normal Yield.	Prospect Compared With Normal Yield.	Horses.	Cattle.	Sheep.	Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.
			Per Cent.	Per Cent.											
Athens	21	83	99	101	2	1	3	8	\$1 01	\$0 86	...	\$0 85	\$0 95	\$1 78	\$26 00
Belmont	26	83	83	88	2	1	3	1	1 00	86	\$0 95	63	88	1 90	27 00
Fairfield	23	87	68	82	3	1	3	3	1 08	78	...	57	75	1 73	24 00
Gallia	11	67	97	92	3	2	4	3	1 04	85	...	66	1 18	1 71	29 00
Guernsey	23	86	69	79	2	1	4	3	1 01	90	...	65	1 05	2 00	26 70
Hocking	21	72	59	72	2	1	5	2	1 04	82	...	70	1 08	1 93	26 50
Jackson	20	82	83	81	2	1	3	1	1 10	84	...	67	1 07	1 74	26 80
Lawrence	22	80	103	94	2	1	1	1	1 05	89	...	63	1 05	1 67	29 67
Licking	30	81	79	82	2	2	2	2	1 06	84	78	64	90	1 72	25 00
Melgs	24	75	102	87	4	2	1	...	1 02	84	80	67	98	1 77	26 89
Monroe	28	71	90	97	3	2	3	1	1 01	89	...	66	91	1 97	28 00
Morgan	22	88	104	98	3	2	3	4	1 00	87	...	62	94	1 93	25 00
Muskingum	24	79	90	94	3	2	3	1	1 05	86	...	66	94	1 76	27 45
Noble	12	89	87	88	2	1	3	2	1 03	85	70	63	89	1 90	25 07
Perry	22	74	74	72	2	1	3	2	1 03	89	...	59	77	1 74	25 56
Vinton	11	64	92	89	2	1	3	3	1 01	83	...	68	1 00	1 73	24 50
Washington	16	79	96	82	3	2	4	3	1 05	92	50	68	1 00	1 86	27 00
Averages	Mch. 1	78	87	87	3	2	4	2	\$1 03	\$0 85	\$0 75	\$0 66	\$0 95	\$1 82	\$28 46
Totals															
Maximum	30	87	104	101	5	4	5	8	1 10	92	95	85	1 18	2 00	29 27
Minimum	11	60	59	72	1	1	1	1	98	78	50	57	75	1 67	24 00

NORTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912,
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Reports Received.	Wheat.			Oats.			Spring Barley.		Winter Barley.		Barley.		Rye.
		Condition Compared With Average.	Damage by Hessian Fly.	Damages by Other Insects.	Area for 1911 as Returned by Township Assessor.	Acres.	Per Cent.	Area for Harvest of 1912.	Per Cent.	Area Sown Compared With Last Year.	Per Cent.	Per Cent. Sown Last Fall.	Per Cent. Sown This Spring.	
	Number.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Allen	13	29	2	7	23,436	117	117	27,420	104	77	16	84	84	64
Auglaize	11	8	1	1	24,575	128	128	31,456	119	100	5	85	85	84
Champaign	14	29	1	1	24,913	136	136	33,982	100	100	100	100	100	85
Crawford	21	19	2	2	27,112	134	134	36,330	112	100	100	100	100	60
Darke	16	24	1	1	40,714	118	118	48,043	25	100	50	50	50	76
Defiance	10	7	1	1	31,973	116	116	37,089	103	100	100	100	100	68
Delaware	13	42	1	1	9,876	126	126	12,444	110	100	100	100	100	71
Fulton	10	11	1	1	26,354	129	129	33,997	110	100	100	100	100	60
Hancock	17	17	1	1	25,556	125	125	31,945	103	20	4	96	96	73
Hardin	8	34	1	1	20,272	108	108	21,894	109	100	100	100	100	81
Henry	12	4	1	1	36,977	131	131	48,440	109	100	3	97	97	75
Logan	14	33	3	1	26,744	141	141	29,418	107	61	3	97	97	80
Lucas	9	8	1	1	20,643	141	141	29,407	127	100	6	94	94	77
Marion	13	27	1	1	26,470	165	165	43,676	100	100	25	75	75	68
Mercer	11	19	1	1	38,188	118	118	45,062	96	100	100	100	100	81
Morrow	16	23	2	1	12,520	126	126	17,776	100	100	100	100	100	72
Ottawa	6	7	1	1	17,228	126	126	21,707	104	100	100	100	100	73
Paulding	13	36	2	1	56,584	113	113	63,940	100	80	1	99	99	78
Putnam	14	24	2	1	31,536	121	121	38,159	103	100	100	100	100	60
Sandusky	8	5	1	1	26,621	160	160	42,594	71	100	15	85	85	49
Seneca	15	17	2	2	28,725	168	168	48,258	100	25	3	97	97	64
Shelby	13	35	4	1	38,355	122	122	46,793	95	30	50	50	50	69
Union	12	15	2	1	19,064	112	112	21,352	125	100	100	100	100	78
Van Wert	8	29	1	1	40,699	111	111	45,169	104	50	4	96	96	81
Williams	10	7	1	10	26,807	152	152	40,747	93	100	5	95	95	62
Wood	16	25	7	6	62,443	118	118	63,683	100	100	7	93	93	63
Wyandot	13	18	7	2	20,137	122	122	24,567	110	25	75	25	25	74
Averages	336	20	1	1	784,522	143	143	1,112,034	101	67	10	90	90	70
Totals														

NORTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912,
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Clover.			Fruit.	Berries.	Live Stock Losses During Winter and Spring.				Price Per Bushel.					Price Per Ton.	
	Average Date of Seeding After March 1.	Acreage Sown Compared With Last Year.	Prospect Compared With Normal Yield.	Prospect Compared With Normal Yield.	Horses.	Cattle.	Sheep.	Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	
			Per Cent.	Per Cent.												Per Cent.
Allen	35	83	70	72	2	2	4	4	4	\$1 08	\$0 77	\$0 96	\$0 55	\$0 85	\$1 58	\$24 00
Auglaize	43	87	81	96	3	3	4	3	3	1 08	73	82	35	82	1 46	25 55
Champaign	32	90	61	81	1	1	4	4	4	1 03	77	1 02	32	86	1 62	24 33
Crawford	38	75	73	76	2	2	4	3	3	1 03	72	80	34	83	1 26	26 26
Darke	38	89	90	85	2	2	3	6	6	1 09	74	91	54	83	1 41	21 60
Defiance	42	85	72	83	3	3	3	2	2	1 08	81	81	59	88	1 75	24 23
Delaware	29	89	74	88	1	1	2	4	4	1 10	72	1 01	34	76	1 52	22 33
Fulton	45	84	66	80	2	2	3	2	2	1 09	73	77	56	88	1 57	22 70
Hancock	36	89	54	64	4	4	6	12	12	1 04	69	1 03	35	91	1 46	22 60
Hardin	34	73	51	58	1	1	3	3	3	1 09	74	1 17	36	88	1 85	23 00
Henry	36	95	75	98	2	2	3	3	3	1 11	91	1 17	56	85	1 48	26 66
Logan	38	88	60	70	1	1	3	3	3	1 08	74	80	56	93	1 67	22 00
Lucas	49	94	74	82	2	2	3	3	3	1 05	71	93	53	85	1 60	25 30
Marion	36	72	57	71	1	1	3	3	3	1 08	81	83	57	86	1 46	22 00
Mercer	41	84	50	70	2	2	3	5	5	1 11	74	1 15	59	90	1 52	25 25
Morrow	33	91	84	84	1	1	3	3	3	1 04	70	91	55	79	1 63	22 70
Ottawa	43	98	64	96	2	2	3	3	3	1 05	73	1 00	56	84	1 63	22 70
Paulding	41	80	80	93	2	2	3	3	3	1 12	75	1 10	58	91	1 39	24 50
Putnam	35	86	64	74	3	3	5	5	5	1 10	76	81	58	86	1 34	24 00
Sandusky	46	78	55	65	3	3	5	5	5	1 06	76	1 00	54	74	1 69	28 00
Seneca	43	83	63	76	1	1	2	2	2	1 05	72	1 00	55	86	1 91	24 00
Shelby	37	86	66	82	3	3	2	4	4	1 07	76	94	54	88	1 43	23 75
Union	35	93	66	65	2	2	2	5	5	1 08	73	...	55	88	1 43	20 89
Van Wert	39	86	66	66	3	3	3	2	2	1 07	85	98	54	88	1 43	23 60
Williams	39	74	64	69	2	2	3	7	7	1 08	90	1 12	56	91	1 49	23 36
Wood	44	93	74	81	3	3	7	8	8	1 11	75	1 00	56	92	1 49	23 36
Wyandot	40	93	69	86	3	3	7	8	8	1 11	75	1 00	56	92	1 49	23 36
Averages	April 9	86	67	77	2	2	3	4	4	\$1 07	\$0 76	\$0 95	\$0 56	\$0 86	\$1 53	\$23 80
Totals																

SOUTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912,
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Reports Received.	Wheat.			Oats.			Spring Barley.		Winter Barley.		Barley.		Rye.
		Condition Compared With Average.	Damage by Hessian Fly.	Damage by Other Insects.	Area for 1911 as Returned by Township Assessor.	Acreage Compared With Last Year.	Estimated Area for Harvest of 1912.	Area Sown Compared With Last Year.	Condition Compared With Average.	Per Cent. Sown Last Fall.	Per Cent. This Spring.			
												Per Cent.	Per Cent.	
Adams	10	72	1	1	4,737	94	4,453	80	90	85	15	86		
Brown	15	59	1	1	6,376	101	6,439	84	60	69	31	88		
Rutler	12	30	4	2	7,737	161	12,537	50	100	100	100	71		
Clark	10	28	4	1	10,891	123	13,396	65	5,003	100	100	72		
Clermont	14	58	4	3	7,696	85	5,003	181	6,592	100	100	74		
Cinton	12	34	1	4	3,642	181	6,592	25	5	100	100	79		
Fayette	8	35	3	1	3,411	126	6,208	88	57	43	87	70		
Franklin	22	39	5	1	8,542	234	10,763	88	57	43	87	94		
Greene	10	28	2	1	7,220	96	16,895	88	57	43	87	84		
Hamilton	9	56	3	1	2,823	97	2,428	88	57	43	87	88		
Highland	17	69	3	1	3,589	97	3,481	88	57	43	87	88		
Madison	9	33	6	6	24,004	108	25,924	100	92	100	100	76		
Miami	13	15	1	1	27,464	140	38,450	100	48	90	100	65		
Montgomery	12	26	1	1	12,307	130	15,999	70	48	90	100	78		
Pickaway	11	44	1	1	918	165	1,515	100	100	100	100	87		
Pike	10	69	1	1	3,720	94	3,497	105	100	100	100	92		
Preble	8	25	1	1	9,767	218	21,292	200	100	100	100	93		
Ross	14	80	1	1	1,917	82	1,572	100	100	100	100	87		
Scioto	11	60	1	1	4,081	92	3,755	100	100	100	100	87		
Warren	9	26	1	1	10,737	138	3,755	100	100	100	100	66		
Averages	236	44	2	1	161,629	133	215,016	91	59	43	58	80		
Totals	236	44	2	1	161,629	133	215,016	91	59	43	58	80		
Maximum	22	80	5	6	27,464	234	38,450	200	92	100	100	94		
Minimum	8	15	1	1	918	65	1,515	25	5	43	10	65		

SOUTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND CONDITION OF WHEAT AND OTHER CROPS, MAY 1, 1912.
AND LIVE STOCK LOSSES DURING WINTER AND SPRING.

Counties.	Clover.		Fruit.	Berries.	Live Stock Losses During Winter and Spring.				Price Per Bushel.					Price Per Ton.	
	Average Date of Seeding After March 1.	Acreage Sown With Last Year.	Prospect Compared With Normal Yield.	Prospect Compared With Normal Yield.	Horses.	Cattle.	Sheep.	Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.
Days.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Bus.	Per Ton.
Adams	19	66	88	92	4	3	4	3	\$1 04	\$0 88	\$0 75	\$0 71	\$0 94	\$1 80	\$29 00
Brown	21	79	82	79	3	2	3	2	1 05	89	1 32	70	90	1 72	33 00
Butler	21	85	74	77	3	2	3	2	1 03	73	1 03	61	83	1 65	33 00
Clark	36	82	71	77	3	2	3	2	1 03	73	1 03	61	83	1 65	33 00
Clermont	16	75	65	77	3	2	3	2	1 03	73	1 10	65	86	1 71	37 64
Clinton	18	90	69	80	3	2	3	2	1 03	73	.....	64	86	1 75	34 86
Fayette	21	93	46	83	3	2	3	2	1 03	71	.....	61	86	1 75	24 00
Franklin	26	77	49	64	4	3	4	3	1 03	77	.....	63	91	1 74	25 86
Greene	25	86	57	67	3	2	3	2	1 07	72	.....	60	86	1 79	35 66
Hamilton	20	78	79	89	3	2	3	2	1 16	85	1 17	63	93	1 73	39 00
Highland	14	90	76	87	3	2	3	2	1 03	78	.....	61	91	1 81	34 29
Madison	32	99	79	86	3	2	3	2	1 05	71	.....	54	84	1 69	24 67
Miami	37	91	50	77	3	2	3	2	1 06	73	.....	53	83	1 51	29 66
Montgomery	40	84	73	80	3	2	3	2	1 12	73	88	61	84	1 49	30 00
Pickaway	21	89	46	80	3	2	3	2	1 07	76	.....	70	80	1 66	30 00
Pike	21	96	73	92	3	2	3	2	1 06	78	.....	53	90	1 93	24 45
Preble	27	95	43	77	3	2	3	2	1 06	75	85	56	87	1 76	27 29
Ross	21	82	64	73	3	2	3	2	1 07	77	.....	64	93	1 71	23 67
Scioto	18	82	92	97	1	1	1	1	1 07	81	.....	63	93	1 76	23 67
Warren	31	93	82	86	1	1	1	1	1 00	76	.....	60	90	1 94	27 67
Averages	Mch. 24	86	68	81	2	2	2	6	\$1.07	\$0 78	\$0 95	\$0 62	\$0 89	\$1 75	\$26 70
Totals															
Maximum	40	99	92	97	5	4	6	15	1 16	89	1 32	71	99	1 94	30 00
Minimum	14	66	43	64	1	1	1	1	1 00	71	1 75	54	80	1 51	24 00

Official Report

OF THE

Ohio Department of Agriculture

ON

Crops and Live Stock July, 1912

The following report is compiled from returns received from the official correspondents of this Department:

WHEAT—Prospect compared with normal yield.....	43 per cent.
WHEAT—Damaged by joint worm.....	3 per cent.
WHEAT—Estimated area for the harvest.....	1,079,894 acres
BARLEY—Prospect compared with normal yield.....	85 per cent.
RYE—Prospect compared with normal yield.....	78 per cent.
OATS—Prospect compared with normal yield.....	98 per cent.
CORN—Area in 1911.....	3,048,194 acres
CORN—Total estimated area for 1912.....	3,197,884 acres
CORN—Area compared with last year.....	105 per cent.
CORN—Condition compared with an average.....	77 per cent.
CORN—Damaged by cut worm.....	7 per cent.
CORN—Damaged by white grub worm.....	4 per cent.
CLOVER—Damaged by white grub worm.....	3 per cent.
POTATOES—Area in 1911.....	111,704 acres
POTATOES—Area compared with last year.....	94 per cent.
POTATOES—Estimated area for 1912.....	104,541 acres
POTATOES—Condition compared with an average.....	93 per cent.
TOBACCO—Area compared with last year.....	81 per cent.
TIMOTHY—Prospect compared with normal yield.....	79 per cent.
PASTURES—Condition compared with an average.....	90 per cent.
HORSES—Condition compared with an average.....	94 per cent.
COLTS—Number compared with an average.....	91 per cent.
CATTLE—Condition compared with an average.....	94 per cent.
CALVES—Number compared with an average.....	92 per cent.
WOOL—Clipped compared with last year.....	91 per cent.

The present wheat prospect shows no material difference from the June report, being now estimated at 43 per cent. Slight damage to crop is noted by joint worms. Ohio cannot now hope to produce a harvest that will equal an average of seven bushels per acre, and, as stated in previous report, the total production for the State will not exceed seven million bushels. This will be about one-fifth of the 1911 production.

Oats show an improvement during the past month, the harvest prospect being now estimated at 98 per cent., based upon an average pro-

duction of 30 bushels per acre being represented by 100 per cent. in the report. The estimated area seeded was 1,877,921 acres. From present prospect this should produce 55,210,887 bushels. The estimated production of the 1911 harvest was 46,442,742 bushels. The present oats area exceeds by 470,000 acres the area of last year.

The area planted to corn shows an increase of 5 per cent. over the 1911 acreage. The total area is estimated at 3,197,884 acres, as against 3,048,194 acres last year. The crop is growing very irregularly, due to the backward season, poor seed and difference in time of planting. The general growing condition of the crop is poor, being estimated at 77 per cent. compared with an average. Damage by cut and grub worm is estimated at 11 per cent.

The area in potatoes shows a decline compared with 1911, being estimated at 104,541 acres, as against 111,704 acres last year. Growing condition is estimated at 93 per cent. compared with an average.

Timothy prospect unfavorable, being estimated at 79 per cent. compared with a normal yield.

NORTHEAST SECTION.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912.

Counties.	Wheat.			Barley.		Rye.		Corn.			
	Reports Received.	Normal Yield.		Damage by Joint Worm.	Estimated Area for Harvest.	Prospect Compared With Normal Yield.	Prospect Compared With Normal Yield.	Area in 1911.	Area Compared With Last Year.	Total Estimated Area for 1912.	Condition Compared With Average.
	Number.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.
Ashland	12	25	1	86	16,504	77	91	24,204	103	24,930	80
Ashtabula	16	82	1	.....	8,310	82	95	15,134	98	14,831	70
Carroll	8	50	2	100	9,274	70	99	12,236	97	11,869	75
Columbiana	14	60	2	.....	18,083	82	99	16,668	101	16,835	79
Coshocton	17	40	6	100	18,090	76	108	26,517	101	26,782	81
Cuyahoga	13	63	1	60	3,082	67	96	5,714	105	6,000	73
Erie	8	26	.....	71	3,161	60	94	16,484	108	17,803	80
Geauga	13	65	.....	88	4,641	83	93	8,348	99	8,265	74
Harrison	13	62	.....	.....	9,033	71	88	10,917	100	10,917	77
Holmes	5	45	3	100	20,098	84	103	22,958	102	23,417	84
Huron	13	28	5	75	17,756	80	97	32,184	108	34,770	76
Jefferson	11	60	6	85	9,795	85	89	11,137	102	11,350	77
Knox	19	43	5	100	20,638	75	101	32,346	105	33,983	77
Lake	74	.....	.....	80	5,096	86	85	6,395	93	5,947	71
Lorain	6	32	6	68	7,074	55	85	19,898	117	23,369	73
Mahoning	13	49	.....	.....	8,665	68	106	19,532	105	18,159	80
Medina	10	31	3	.....	6,875	61	95	20,008	108	21,508	85
Portage	11	53	.....	53	12,350	75	101	15,407	105	16,177	79
Richland	15	22	2	.....	11,508	63	95	30,564	105	32,049	81
Stark	19	33	2	50	34,262	88	99	39,432	102	37,041	67
Summit	15	43	.....	99	8,843	88	99	19,424	107	16,690	76
Tuscarawas	18	53	2	.....	7,791	61	99	13,184	107	13,488	82
Trumbull	17	48	.....	.....	18,299	79	101	19,068	107	18,866	82
Wayne	10	28	1	97	18,182	87	103	37,545	110	41,650	91
Averages .....	.....	47	3	82	298,120	74	97	457,866	104	477,838	77
Totals	312	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATE AVERAGES AND TOTALS.

Averages	43	3	85	78	98	105	77	7	4
Totals	7,093	.....	1,079,894	.....	3,048,194	.....	3,197,884	.....	.....

NORTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Clover.	Potatoes.			Tobacco.	Timothy.	Pasture.	Horses.	Colts.	Cattle.	Calves.	Wool.
		Area in 1911.	Area Compared With Last Year.	Estimated Area for 1912.	Condition Compared With an Average.	Prospect Compared With Normal Yield.	Condition Compared With an Average.	Condition Compared With an Average.	Number Compared With an Average.	Condition Compared With an Average.	Number Compared With an Average.	Clip Compared With Last Year.
	Per Cent.	Acres.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Ashtabula	5	785	98	720	97	76	88	96	98	91	93	90
Ashtabula	...	3,690	90	3,653	98	79	93	96	95	99	97	94
Carroll	...	573	99	567	91	83	89	96	98	100	95	83
Columbiana	...	2,478	96	2,379	95	78	97	98	93	99	97	81
Coshocton	...	1,105	98	1,084	97	74	88	96	84	93	86	90
Cuyahoga	...	5,443	93	5,062	93	74	88	90	91	93	94	97
Erie	...	3,350	93	3,116	88	63	79	92	93	97	94	97
Geauga	...	2,719	97	2,637	91	73	96	95	93	96	96	86
Harrison	...	100	94	94	90	73	82	96	90	93	92	93
Holmes	...	692	98	678	95	86	91	96	94	96	93	89
Huron	...	1,495	102	1,525	94	72	87	92	96	94	95	95
Jefferson	...	765	99	757	93	65	91	95	87	97	96	92
Knox	...	375	98	368	92	71	94	92	88	91	92	88
Lake	...	1,746	100	1,746	102	71	94	100	95	100	90	96
Lorain	...	3,036	99	3,006	86	59	91	89	91	92	93	92
Mahoning	...	2,512	92	2,311	88	84	99	98	86	96	96	96
Medina	...	3,260	85	2,771	80	63	97	84	90	86	91	90
Portage	...	6,230	89	5,545	95	72	97	99	89	93	99	95
Richland	...	1,944	97	1,886	97	62	80	93	87	92	88	91
Stark	...	3,750	93	3,488	88	72	84	94	92	93	89	88
Summit	...	3,338	81	2,704	89	76	92	96	89	95	95	86
Tuscarawas	...	3,984	93	3,129	92	85	94	98	100	99	95	95
Wayne	...	1,798	101	1,816	96	84	94	97	88	94	95	93
Averages	...	3,750	88	3,300	93	87	91	100	96	99	96	91
Totals	4	58,249	93	54,342	93	74	89	95	92	95	93	91

STATE AVERAGES AND TOTALS.

Averages	3	...	94	...	93	81	79	90	94	91	94	92	91
Totals	...	111,704	...	104,541	...	...	...	...	...	...	...	...	...

SOUTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Wheat.			Barley.	Rye.	Oats.	Corn.					Damage by White Grub	
	Reports Received.	Damage by Joint Worm.					Area in 1911.	Area Compared With Last Year.	Total Estimated Area for 1912.	Condition Compared With Average.	Damage by Cut Worm.		
		Prospect Compared With Normal Yield.	Estimated Area for the Harvest.										Prospect Compared With Normal Yield.
	Number.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.
Athens	8	73	1	7,880	.....	91	104	12,069	101	12,190	84	1	1
Belmont	18	54	10	13,636	80	85	86	17,675	101	17,852	80	13	9
Fairfield	16	53	11	36,984	80	81	97	49,887	98	48,889	76	5	4
Gallia	9	65	3	8,179	.....	72	94	16,948	99	16,779	75	3	3
Guernsey	19	54	6	10,963	90	76	89	15,307	101	15,460	75	12	4
Hocking	6	62	11	10,454	.....	79	80	12,014	98	11,774	69	9	6
Jackson	16	61	9	7,973	.....	95	81	12,364	92	11,375	74	9	4
Lawrence	11	77	5	2,283	100	90	96	13,166	106	13,956	81	4	3
Licking	27	43	6	26,338	.....	76	100	45,303	106	48,021	81	6	4
Meigs	12	66	2	10,862	.....	84	92	11,629	99	11,513	77	4	3
Monroe	13	60	4	11,066	.....	77	89	16,348	98	16,031	74	14	4
Morgan	15	65	5	11,733	100	73	91	14,538	90	13,084	65	10	5
Muskingum	1	53	3	21,639	.....	66	97	28,292	102	28,858	82	10	5
Noble	13	62	5	9,656	60	81	87	14,635	100	14,635	72	17	5
Perry	17	57	5	14,217	.....	82	109	16,403	99	16,239	77	12	2
Vinton	8	82	1	6,774	.....	70	96	11,408	104	11,864	81	6	4
Washington	17	79	4	17,634	100	91	101	18,069	99	17,888	79	10	4
Averages	.....	63	5	.....	87	81	94	.....	100	.....	77	9	4
Totals	246	.....	.....	228,171	.....	.....	.....	326,055	.....	326,398	.....	.....	.....

STATE AVERAGES AND TOTALS.

Averages	43	3	.....	85	78	98	105	3,048,194	.....	3,197,884	77	7	4
Totals	1,093	.....	1,079,894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SOUTHEAST SECTION—Concluded.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Clover.	Potatoes.				Tobacco.	Timothy.	Pasture.	Horses.	Cattle.	Calves.	Wool.
	Damage by White Grub Worm.	Area Compared With Last Year.		Estimated Area for 1912.	Condition Compared With an Average.	Area Compared With Last Year.	Prospect Compared With Normal Yield.	Condition Compared With an Average.	Condition Compared With an Average.	Number Compared With an Average.	Number Compared With an Average.	Clip Compared With Last Year.
		Acres.	Per Cent.									
Athens	1	552	98	541	100	.....	96	103	98	101	99	99
Belmont	3	883	94	830	94	34	65	97	97	88	94	87
Fairfield	6	783	92	702	96	.....	89	91	93	91	97	95
Gallia	2	83	86	71	90	54	79	88	93	79	90	90
Guernsey	3	430	91	391	89	53	66	89	96	90	94	87
Hocking	11	613	100	613	93	.....	77	103	98	100	93	96
Jackson	1	290	88	255	86	.....	76	92	86	81	92	86
Lawrence	1	457	100	457	104	102	97	96	90	82	95	98
Licking	7	939	95	892	91	.....	80	96	93	92	95	95
Meigs	1	747	93	689	95	53	88	95	95	91	95	94
Monroe	6	1,177	98	1,133	97	69	78	94	94	83	91	89
Morgan	2	391	93	324	86	85	79	99	98	93	93	88
Muskingum	3	381	97	365	105	.....	76	95	95	84	96	91
Noble	10	573	85	544	91	82	66	92	99	90	90	88
Perry	1	785	103	788	100	110	89	87	84	83	83	80
Vinton	7	858	97	1,721	100	.....	83	103	96	96	100	96
Washington	7	1,850	93	1,721	100	.....	90	99	95	96	90	86
Averages	5	.....	96	.....	94	74	81	95	95	90	95	91
Totals	.....	12,246	.....	11,698	.....	.....	.....	.....	.....	.....	.....	.....
STATE AVERAGES AND TOTALS.												
Averages	3	.....	94	.....	93	81	79	90	94	91	94	91
Totals	.....	111,704	.....	104,541	.....	.....	.....	.....	.....	.....	.....	.....

NORTHWEST SECTION.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Wheat.			Barley.			Rye.			Oats.			Corn.						Damage by White Grub Worm.
	Reports Received.	Prospect Compared With Normal Yield.	Damage by Joint Worm.	Estimated Area For the Harvest.	Prospect Compared With Normal Yield.	Per Cent.	Prospect Compared With Normal Yield.	Per Cent.	Per Cent.	Prospect Compared With Normal Yield.	Per Cent.	Per Cent.	Area in 1911.	Per Cent.	Area Compared With Last Year.	Total Estimated Area for 1912.	Condition Compared With Average.	Per Cent.	Damage by Cut Worm.
	Number.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.
Allen	12	17	3	10,350	88	89	94	102	40,763	94	102	41,578	81	102	105	41,578	81	102	9
Angelaize	11	24	3	3,925	88	89	94	105	47,176	94	105	48,535	75	105	108	48,535	75	108	3
Champaign	11	35	3	13,896	77	72	94	118	59,518	94	118	70,231	81	118	111	70,231	81	111	3
Crawford	15	15	4	8,800	77	71	100	100	39,029	100	100	43,322	83	100	105	43,322	83	105	6
Darke	13	38	8	11,816	65	89	101	89	89,888	101	89	94,393	75	89	103	94,393	75	103	16
Defiance	6	6	5	732	95	64	101	73	34,230	101	73	35,257	84	103	112	35,257	84	112	6
Delaware	13	31	5	9,881	110	72	106	102	36,562	106	102	38,044	79	102	105	38,044	79	105	3
Fulton	15	27	5	3,962	92	50	102	88	53,385	102	88	55,997	83	102	105	55,997	83	105	3
Hancock	15	24	9	10,117	91	87	98	105	53,326	98	105	55,997	79	105	109	55,997	79	109	7
Hardin	17	27	8	4,941	87	84	96	116	36,668	96	116	38,688	75	116	119	38,688	75	119	4
Henry	17	36	2	1,501	87	67	116	109	60,421	116	109	65,859	79	109	101	65,859	79	101	3
Logan	17	36	2	5,720	90	87	96	109	45,430	96	109	48,884	76	109	101	48,884	76	101	3
Lucas	9	34	1	6,735	90	61	104	104	26,346	104	104	28,244	73	104	109	28,244	73	109	3
Marion	14	32	1	10,793	82	91	102	102	50,546	102	102	55,136	74	102	107	55,136	74	107	3
Mercer	10	23	1	12,498	82	71	106	106	51,044	106	106	55,136	74	106	107	55,136	74	107	3
Morrow	17	21	5	12,868	89	74	106	106	25,917	106	106	27,731	78	106	107	27,731	78	107	3
Ottawa	13	32	1	2,068	89	85	109	109	23,892	109	109	25,584	74	109	113	25,584	74	113	3
Faulding	11	33	1	2,305	89	85	109	109	53,760	109	109	57,004	76	109	103	57,004	76	103	3
Futnam	11	37	3	4,444	86	73	104	104	41,854	104	104	44,784	83	104	107	44,784	83	107	3
Sandusky	11	37	3	5,448	86	73	104	104	41,854	104	104	44,784	83	104	107	44,784	83	107	3
Seneca	10	48	6	26,023	86	72	104	104	51,951	104	104	55,224	78	104	114	55,224	78	114	3
Shelby	16	33	2	6,152	88	51	96	113	52,803	96	113	56,780	95	113	109	56,780	95	109	3
Union	12	34	3	7,183	88	78	105	105	48,863	105	105	53,305	82	105	107	53,305	82	107	3
Van Wert	9	49	1	5,828	92	82	102	102	53,749	102	102	58,361	76	102	109	58,361	76	109	3
Williams	13	17	7	4,816	93	69	107	107	31,639	107	107	34,487	82	107	109	34,487	82	109	3
Wood	13	31	7	3,550	93	83	101	101	88,911	101	101	93,135	80	101	107	93,135	80	107	3
Wyandot	14	14	3	6,189	85	88	90	113	39,415	90	113	44,539	77	113	108	44,539	77	108	4
Averages .....	.....	26	3	188,231	91	76	100	108	1,276,760	100	108	1,376,145	80	108	108	1,376,145	80	108	7
Totals	317	.....	3	188,231	.....	.....	.....	.....	1,276,760	.....	.....	1,376,145	.....	.....	.....	1,376,145	.....	.....	.....

NORTHWEST SECTION—Concluded.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Clover.		Potatoes.				Tobacco.		Timothy.		Pasture.		Horses.		Cattle.		Calves.		Wool.	
	Damage by White Grub Worm.	Per Cent.	Acres.	Area Compared With Last Year.	Estimated Area for 1912.	Condition Compared With Average.	Area Compared With Last Year.	Per Cent.	Prospect Compared With Normal Yield.	Condition Compared With Average.	Number Compared With Average.	Per Cent.	Condition Compared With Average.	Number Compared With Average.	Per Cent.	Condition Compared With Average.	Number Compared With Average.	Per Cent.	Clip Compared With Last Year.	
Allen	3		477	93	444	94	100	81	88	98	90	96	96	96	96	96	96	96	96	
Auglaize	1		992	95	942	85	80	71	85	90	92	92	92	92	92	92	92	92	92	
Champaign	2		388	90	349	85	80	73	87	94	90	90	90	91	90	90	91	91	91	
Crawford	2		1,615	96	1,550	89	81	79	72	83	83	83	83	84	82	82	82	81	87	
Darke	1		1,088	96	1,044	90	81	79	72	83	87	87	87	84	90	90	89	89	89	
Defiance	4		802	92	788	94	65	82	88	97	92	92	92	92	92	92	92	92	91	
Delaware	1		463	98	454	99	81	81	96	97	92	92	92	92	92	92	92	92	91	
Delaware	1		662	98	649	97	81	81	80	97	92	92	92	92	92	92	92	92	91	
Fulton	1		921	96	884	89	81	68	80	97	92	92	92	92	92	92	92	92	92	
Hancock	1		704	97	683	91	81	75	80	92	92	92	92	92	92	92	92	92	92	
Hardin	1		587	96	584	89	81	69	81	92	92	92	92	92	92	92	92	92	92	
Henry	1		537	97	529	95	81	72	87	99	90	90	90	90	90	90	90	90	90	
Logan	1		373	94	351	96	70	73	95	97	92	92	92	92	92	92	92	92	92	
Lucas	3		3,383	91	3,079	89	81	76	87	96	90	90	90	90	90	90	90	90	90	
Marion	2		692	97	671	92	81	76	85	95	95	95	95	95	95	95	95	95	95	
Mercer	1		574	99	568	94	77	77	92	89	89	89	89	89	89	89	89	89	89	
Morrow	8		753	94	708	94	70	70	94	98	98	98	98	98	98	98	98	98	98	
Ottawa	1		902	100	902	92	82	82	86	98	98	98	98	98	98	98	98	98	98	
Paulding	1		210	91	191	98	81	78	80	93	93	93	93	93	93	93	93	93	93	
Putnam	5		684	90	616	94	86	86	84	93	93	93	93	93	93	93	93	93	93	
Sandusky	10		2,334	86	2,007	96	86	86	70	87	87	87	87	87	87	87	87	87	87	
Seneca	4		1,847	99	1,829	88	80	74	80	93	93	93	93	93	93	93	93	93	93	
Shelby	4		813	89	784	100	86	81	80	91	91	91	91	91	91	91	91	91	91	
Union	2		178	99	176	94	86	85	90	93	93	93	93	93	93	93	93	93	93	
Van Wert	2		990	97	960	94	81	77	88	94	94	94	94	94	94	94	94	94	94	
Williams	1		393	99	389	95	81	73	88	91	91	91	91	91	91	91	91	91	91	
Wood	6		920	91	837	93	81	71	86	94	94	94	94	94	94	94	94	94	94	
Wyandot	1		535	96	514	91	76	76	86	94	94	94	94	94	94	94	94	94	94	
Averages Totals	3		24,280	94	22,828	93	80	75	85	93	91	93	91	93	91	93	91	91	91	

SOUTHWEST SECTION.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Continued.

Counties.	Reports Received.	Wheat.		Barley.	Rye.	Oats.	Corn.							
		Prospect Com- pared With Normal Yield.	Damage by Joint Worm.				Estimated Area for the Har- vest.	Prospect Com- pared With Normal Yield.	Prospect Com- pared With Normal Yield.	Area in 1911.	Area Compared With Last Year.	Total Estimated Area for 1912.	Condition (Com- pared With Average.	Damage by Cut Worm.	Damage by White Grub
	Number.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Acres.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Adams	11	63	6	11,854	87	95	95	95	34,749	88	30,579	69	1	8
Brown	14	62	3	13,490	83	95	95	95	43,514	96	41,713	75	1	1
Butler	10	35	2	31,936	100	96	96	96	53,492	114	60,981	74	1	1
Clark	7	34	3	10,284	80	103	103	103	48,492	103	49,954	83	3	3
Clermont	11	50	5	8,923	72	84	84	84	37,694	102	34,062	66	3	3
Clinton	13	43	3	19,645	55	78	108	108	60,831	107	53,089	75	3	3
Fayette	6	49	3	25,141	100	82	99	99	54,989	97	52,476	70	4	4
Franklin	17	33	3	21,710	40	76	120	120	54,762	109	59,681	75	4	4
Greene	8	19	1	9,140	60	93	99	99	57,233	107	61,239	81	3	3
Hamilton	8	57	1	12,615	83	81	87	87	16,476	92	15,158	69	3	3
Highland	16	55	7	27,557	100	77	94	94	53,940	95	51,243	73	6	6
Madison	11	42	1	6,175	77	107	107	107	75,720	105	79,506	80	4	4
Miami	9	35	1	8,994	100	88	99	99	53,869	107	57,640	83	3	3
Montgomery	11	21	4	10,850	85	83	98	98	48,274	98	47,309	72	5	5
Pickaway	13	43	2	39,789	84	99	99	99	74,894	111	83,132	68	4	4
Pike	13	77	2	13,652	65	83	105	105	26,453	104	27,511	77	4	4
Preble	8	36	1	25,117	81	117	88	88	60,568	115	69,653	70	5	5
Ross	11	62	3	43,510	100	90	99	99	60,570	91	55,119	74	4	4
Scioto	12	75	3	13,943	100	90	102	102	22,793	98	22,337	82	5	5
Warren	9	34	3	11,107	78	111	111	111	49,753	101	50,251	66	1	1
Averages	218	46	3	365,372	77	83	101	101	987,513	103	1,014,703	74	4	3
Totals														

STATE AVERAGES AND TOTALS.

Averages Totals	1,093	43	3	1,079,894	85	78	98	105	3,048,194	105	3,197,884	77	7	4
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SOUTHWEST SECTION—Concluded.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON CONDITION OF CROPS JULY 1, 1912—Concluded.

Counties.	Clover.		Potatoes.		Tobacco.		Timothy.		Pasture.		Horses.		Cattle.		Calves.		Wool.	
	Area in 1911.	Area Compared With Last Year.	Estimated Area for 1912.	Condition Compared With an Average.	Area Compared With Last Year.	Prospect Compared With Normal Yield.	Condition Compared With an Average.	Per Cent.	Per Cent.	Per Cent.	Condition Compared With an Average.	Per Cent.	Condition Compared With an Average.	Per Cent.	Number Compared With an Average.	Per Cent.	Clip Compared With Last Year.	Per Cent.
Adams	483	91	440	97	83	83	91	91	91	88	91	91	92	88	83	91	91	91
Brown	255	95	242	89	76	78	90	90	90	90	90	90	97	94	95	96	96	96
Butler	1,294	97	1,255	89	100	84	90	90	90	90	94	91	100	93	94	95	95	98
Clark	1,756	87	658	89	100	76	87	80	87	80	86	86	89	89	95	92	92	92
Clermont	1,931	88	907	84	86	76	86	86	86	86	86	86	91	94	96	92	92	92
Clinton	78	89	69	86	95	86	86	86	86	86	86	86	95	96	92	92	92	92
Fayette	78	86	7	91	95	76	86	86	86	86	86	86	91	96	92	92	92	92
Franklin	1,631	93	1,631	91	76	80	86	86	86	86	86	86	86	96	92	92	92	92
Greene	1,754	98	948	93	76	80	86	86	86	86	86	86	86	96	92	92	92	92
Hamilton	4,867	89	3,811	76	103	88	89	89	89	89	89	89	91	99	99	90	90	90
Highland	83	92	76	95	55	84	94	94	94	94	89	87	91	99	99	90	90	90
Madison	68	97	66	95	...	84	94	94	94	94	89	87	91	99	99	90	90	90
Miami	1,230	87	1,193	98	...	85	85	85	85	85	88	88	90	94	94	94	94	94
Montgomery	912	90	786	90	84	83	90	90	90	90	91	91	90	95	96	96	96	96
Pickaway	255	89	227	90	...	85	85	85	85	85	92	92	92	95	91	91	91	91
Pike	455	108	491	98	68	96	93	93	93	93	92	92	92	95	91	91	91	91
Preble	324	102	330	114	78	92	80	80	80	80	93	93	89	100	99	99	99	99
Ross	754	87	666	114	78	92	92	92	92	92	89	89	87	96	91	91	91	91
Scioto	1,805	97	1,557	100	73	102	103	103	103	103	94	94	90	94	97	94	94	94
Warren	301	104	313	96	75	71	91	91	91	91	96	96	100	99	97	97	97	97
Averages	...	93	...	93	82	84	90	90	90	90	92	92	93	95	93	93	94	94
Totals	16,629	...	15,673	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

STATE AVERAGES AND TOTALS.									
Averages	3	94	...	93	81	79	90	94	91
Totals	...	111,704	...	104,541	...	...	...	...	...

Official Report.

OF THE

Ohio Department of Agriculture

ON THE

Condition of Crops, October, 1912

The following report is compiled from returns received from the official correspondents of the Department:

WHEAT—

Estimated area harvested.....	1,021,623 acres
Product per acre.....	10 bushels
Total estimated product for 1912.....	10,454,425 bushels
Quality compared with an average.....	76 per cent.
Crop of 1911 still in producers' hands.....	10 per cent.

OATS—

Area as returned by township assessors.....	1,865,449 acres
Product per acre.....	44 bushels
Total estimated product for 1912.....	83,171,314 bushels
Quality compared with an average.....	93 per cent.

BARLEY—Fall and Spring:

Area as returned by township assessors.....	37,117 acres
Product per acre.....	29 bushels
Total estimated product for 1912.....	1,077,549 bushels
Quality compared with an average.....	89 per cent.

RYE—

Area as returned by township assessors.....	85,624 acres
Product per acre.....	17 bushels
Total estimated product for 1912.....	1,451,389 bushels
Quality compared with an average.....	93 per cent.

CORN—

Prospect compared with normal yield.....	96 per cent.
Cut up for fodder.....	68 per cent.
Average date for fodder cutting.....	September 25

POTATOES—Probable total yield compared with last year..... 124 per cent.

TOBACCO—Prospect compared with an average yield..... 94 per cent.

PASTURES—Condition compared with an average..... 107 per cent.

APPLES—Prospect compared with last year..... 63 per cent.

With the actual results of harvest now definitely known, Ohio's present wheat production is one of the poorest recorded by this Department. The harvest figures here presented are based on the area returned by township assessors less the estimated area plowed up as reported by our official correspondents. No doubt the total production will show some increase over the estimate now reported.

The harvest is now estimated at 10,454,425 bushels, an average production of but 10 bushels per acre. While this is somewhat better than earlier reports indicated, it practically means failure. The wheat generally is of poor quality. The State average is estimated at 76 per cent. One year ago quality was reported at 94 per cent., with a total estimated production of 31,092,382 bushels. Of the crop of 1911 it is estimated that 10 per cent. still remains in producer's hands. Correspondents report that in some sections of the State rains have retarded seeding. Many note the fact that the 1913 area will not be as great as the one just harvested.

Oats show a bumper production, the harvest being estimated at 83,171,314 bushels. This is an increase of approximately 37,000,000 bushels over the estimated crop of 1911. The average production per acre is reported at 44 bushels, as against 31 bushels one year ago. The quality of the grain is excellent.

Rye and barley productions also show healthy increases over last year.

Corn prospects are most flattering. The present prospect is estimated at 96 per cent., based upon 35 bushels per acre representing 100 per cent. On the corresponding date one year ago the prospect was estimated at 91 per cent. As the area planted is much greater than in 1911 the harvest should be most bountiful. The crop is late in maturing, due to cool, wet weather in July and late planting.

Reports indicate that the yield of potatoes will be much greater than that of last year. Correspondents estimate the present yield at 124 per cent., in comparison with 1911. In the northeast section of the State damage is reported by rot and grub worm.

The crop of apples will fall far short of the excellent harvest of last year. In comparison with that crop the present estimate is 63 per cent.

NORTHEAST SECTION.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE
CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Wheat.					Oats.					Barley.				
	Number Reports Received.	Estimated Area Harvested.	Product Per Acre Estimated From Turns.	Total Estimated For Product 1912.	Quality Compared With an Average.	Crop of 1911 Still in Producers' Hands.	Area as Returned by Township Assessors.	Product Per Acre Estimated From Turns.	Bushels.	Per Cent.	Area of Winter and Spring As Returned by Township Assessors.	Product Per Acre Estimated From Turns.	Total Estimated For Product 1912.	Quality Compared With an Average.	
															Acres.
Ashland	10	15,256	6	91,536	80	7	21,732	43	934,476	94	107	18	1,928	83	
Ashtabula	16	7,260	14	101,640	96	8	28,159	39	1,098,201	90	28	25	700	85	
Carroll	10	9,037	9	81,333	90	16	14,162	32	453,184	97	8	25	200	100	
Columbiana	10	17,366	8	138,928	86	11	20,797	35	727,895	89	8	22	176	80	
Coshocton	16	18,795	9	169,155	80	16	12,373	37	382,321	102					
Cuyahoga	10	4,852	10	48,520	76	12	12,372	41	507,252	82					
Erie	7	3,429	6	20,574	67	17	19,288	45	867,960	83					
Geauga	10	3,985	12	47,940	91	10	16,318	45	734,310	78	779	19	14,801	82	
Harrison	14	9,086	12	109,932	93	16	8,025	34	272,850	95	14	20	280	100	
Holmes	16	22,635	7	158,445	83	6	18,040	38	685,520	100	33	20	180	100	
Huron	14	17,648	6	105,888	70	4	33,056	43	1,421,468	89	114	14	1,596	75	
Jefferson	11	9,377	13	121,901	89	11	10,983	33	361,779	87	4	23	112	70	
Knox	19	21,964	12	263,568	86	12	7,508	39	370,812	101	3	25	175	90	
Lake	4	2,779	14	38,906	95	55	7,769	38	295,222	84	16	30	480	90	
Lorain	15	4,939	6	29,634	57	13	30,032	44	1,321,408	91	204	20	4,080	75	
Mahoning	10	8,320	7	58,240	83	15	23,489	42	886,958	81	381	22	8,382	85	
Medina	11	6,975	5	34,815	70	7	27,502	44	1,210,988	98	51	20	1,020	80	
Portage	15	11,965	10	119,650	86	19	23,812	44	1,047,728	86	8	20	160	80	
Richland	11	12,627	5	63,135	65	14	28,280	46	1,300,860	93	49	45	2,205	98	
Stark	16	31,156	7	218,092	72	3	23,142	40	1,285,680	89	23	12	276	80	
Summit	16	8,335	7	58,345	75	7	30,332	43	874,276	86	6	20	120	80	
Trumbull	14	5,771	9	127,848	87	10	24,104	42	1,012,368	92					
Tuscarawas	16	18,264	7	127,848	82	15	19,344	37	1,157,728	95					
Wayne	12	16,153	4	64,612	49	11	37,717	40	1,508,680	84	56	25	1,400	83	
Averages	293	287,984	8	2,323,736	80	13	497,286	41	20,376,984	90	1,916	21	39,619	85	
Totals															
STATE AVERAGES AND TOTALS.															
Averages	969	1,021,623	10	10,454,425	76	10	1,865,449	44	83,171,314	93	37,117	29	1,077,549	89	
Totals															

NORTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Rye.			Corn.			Potatoes.	Tobacco.	Pastures.	Apples.	
	Area as Returned by Township Assessors.	Product Per Acre Estimated From Returns.	Total Estimated Product For 1912.	Quality Compared With an Average.	Prospect Compared With an Average.	Cut Up For Podder.	Date of Cutting For Podder. Days After September 1st.	Probable Total Yield Compared With Last Year.	Prospect Compared With an Average.	Condition Compared With an Average.	Prospect Compared With Last Year.
	Acres.	Bushels.	Bushels.	Per Cent.	Per Cent.	Per Cent.	Days.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Ashtabula	1,212	16	19,392	100	90	73	16	118	90	106	84
Ashland	699	17	11,883	97	91	32	29	105	105	111	94
Carrion	121	14	1,894	94	82	58	25	113	100	110	70
Columbiana	281	10	2,810	97	88	61	32	125	100	131	70
Coshocton	744	13	9,872	98	99	90	26	139	93	110	65
Cuyahoga	216	13	2,808	90	76	34	28	78	80	102	77
Erie	646	17	10,982	82	95	76	20	80	100	97	78
Geauga	177	9	1,593	90	72	48	26	89	60	111	127
Harrison	157	12	1,884	94	96	23	29	132	97	113	90
Holmes	362	13	4,706	100	88	64	31	100	100	120	58
Huron	122	20	2,440	96	95	37	27	96	100	109	76
Jefferson	446	17	7,582	94	94	33	26	123	100	111	77
Knox	2,100	20	42,000	97	95	83	24	146	100	116	58
Lake	404	18	7,272	100	91	80	26	91	100	119	99
Lorain	93	18	1,874	98	67	52	31	107	100	116	79
Mahoning	151	9	1,359	96	91	31	23	93	90	102	63
Medina	148	25	3,700	85	87	60	26	110	100	113	70
Portage	74	20	740	95	85	59	26	73	100	110	78
Richland	1,677	24	40,248	95	100	56	24	113	100	104	91
Stark	214	12	2,568	77	77	46	25	91	100	102	48
Summit	147	16	2,352	94	63	73	28	92	120	103	50
Trumbull	144	9	1,286	79	75	41	28	104	100	105	55
Tuscarawas	667	13	7,891	96	106	42	26	125	100	119	44
Wayne	183	15	2,745	83	90	80	29	86	91	106	89
Averages	.....	18	.....	93	86	58	Sept. 26	106	95	110	75
Totals	10,855	.....	191,291	.....	.....	.....	.....	.....	.....	.....	.....

STATE AVERAGES AND TOTALS.

	17	93	96	68	124	94	107	63
Averages	.....	.....	.....	.....	.....	.....	.....	.....
Totals	85,624	1,451,389	.....	.....	.....	.....	.....	.....

SOUTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Wheat.						Oats.						Barley.					
	Number Reports Received.	Estimated Area Harvested.	Product Per Acre Estimated From Threshers' Returns.	Total Estimated Product 1912.	Quality Compared With an Average.	Crop of 1911 Still in Producers' Hands.	Area as Returned by Township Assessors.	Product Per Acre Estimated From Threshers' Returns.	Total Estimated Product 1912.	Quality Compared With an Average.	Area of Winter and Spring as Returned by Township Assessors.	Product Per Acre Estimated From Threshers' Returns.	Total Estimated Product 1912.	Quality Compared With an Average.				
Acres.	Bushels.	Per Cent.	Acres.	Bushels.	Per Cent.	Acres.	Bushels.	Per Cent.	Acres.	Bushels.	Per Cent.	Acres.	Bushels.	Per Cent.				
Athens	9	7,561	14	105,854	86	21	2,387	30	71,610	95	6	20	20	120	90			
Belmont	17	13,391	10	133,910	84	14	11,704	28	327,712	96	37	21	21	777	90			
Fairfield	14	41,849	10	413,490	82	9	4,084	38	155,192	98	2	22	22	44	95			
Gallia	9	9,144	9	82,296	81	8	2,531	26	65,806	88	.....	.....	.....	.....	.....
Guernsey	16	10,494	10	104,940	87	18	6,751	30	202,530	96	32	20	20	640	98			
Hocking	15	10,679	10	106,790	82	8	1,767	28	45,942	98	.....	.....	.....	.....	.....
Jackson	11	7,378	10	73,780	87	19	1,569	25	39,225	92	.....	.....	.....	.....	.....
Lawrence	9	2,184	14	30,576	91	9	2,989	26	75,608	86	6	20	20	120	90			
Licking	18	25,936	14	233,424	82	4	10,177	41	417,257	99	6	20	20	580	95			
Meigs	11	9,754	12	117,048	95	4	2,376	31	173,656	96	29	17	30	510	100			
Monroe	11	10,387	10	103,870	86	2	7,604	28	212,912	96	11	22	22	242	90			
Morgan	11	11,944	13	143,572	95	9	2,338	32	74,816	96	7	20	20	140	92			
Muskingum	16	21,119	12	253,428	93	8	5,550	33	183,150	99	20	20	20	400	100			
Noble	12	10,276	11	113,036	93	15	3,963	32	126,816	97	18	15	15	270	100			
Perry	12	16,282	10	162,820	93	10	2,614	39	101,946	100	.....	.....	.....	.....	.....
Vinton	8	6,750	13	87,750	79	12	1,624	26	42,254	92	.....	.....	.....	.....	.....
Washington	14	17,034	12	204,408	91	2	6,813	34	231,642	100	4	22	22	88	90			
Averages .....	.....	280,742	11	2,470,792	88	10	76,760	32	2,448,044	96	195	21	21	4,051	93		
Totals	301	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
STATE AVERAGES AND TOTALS.																		
Averages .....	.....	.....	10	.....	76	10	1,865,449	44	83,171,314	93	.....	29	1,077,549	89	.....		
Totals	969	1,021,623	.....	10,454,425	.....	.....	.....	.....	.....	.....	37,117	.....	.....	.....	.....

SOUTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Rye.				Cora.		Potatoes.		Tobacco.		Pastures.		Apples.	
	Area as Returned by Township Assessors.	Product Per Acre Estimated from Threshers' Returns.	Total Estimated Product For 1912.	Quality Compared With an Average.	Prospect Compared With an Average.	Cut Up For Roder.	Date of Cutting For Roder.	Days After September 1st.	Per Cent.	Yield Compared With Last Year.	Prospect Compared With an Average.	Per Cent.	Condition Compared With an Average.	Prospect Compared With Last Year.
	Acres.	Bushels.	Bushels.	Per Cent.	Per Cent.	Per Cent.	Days.							
Athens	131	12	1,703	99	103	75	26			146	100	114		114
Belmont	726	12	11,816	93	108	64	31			178	83	110		117
Fairfield	555	16	8,880	96	102	83	25			122	100	118		121
Gallia	897	12	9,884	88	92	93	29			128	88	93		151
Guernsey	510	12	6,120	96	100	60	27			189	88	110		64
Hocking	148	13	1,924	89	101	60	22			131	.....	102		32
Jackson	224	16	3,584	72	89	51	23			123	.....	100		46
Lawrence	164	16	2,834	78	99	78	32			121	91	111		144
Licking	3,149	15	47,235	97	98	89	24			120	.....	119		63
Meigs	211	16	3,376	98	96	67	28			174	81	102		116
Monroe	326	13	10,738	91	97	73	24			175	92	113		84
Morgan	128	13	1,664	100	101	86	25			143	88	110		87
Muskingum	578	13	7,614	83	101	63	31			147	103	114		65
Noble	278	12	3,336	85	105	74	26			145	85	119		87
Perry	313	12	3,756	94	102	65	25			127	100	107		77
Vinton	91	14	1,274	90	101	100	37			123	94	104		78
Washington	397	13	3,991	98	105	87	23			204	93	106		119
Averages .....	.....	14	.....	91	100	76	Sept. 26			147	91	103		86
Totals	9,146	.....	129,019	.....	.....	.....	.....			.....	.....	.....		.....

STATE AVERAGES AND TOTALS.

Averages .....	.....	17	.....	93	96	68	Sept. 25			124	94	107		63
Totals	85,624	.....	1,451,389	.....	.....	.....	.....			.....	.....	.....		.....

NORTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Wheat.					Oats.					Barley.						
	Number Reports Received.	Estimated Area Acres.	Product Per Acre Estimated From Threshers' Re- turns.	Bushels.	Total Estimated For Product 1912.	Quality Com- pared With an Average.	Crop of 1911 Still in Pro- ducers' Hands.	Area as Re- turned by Township As- sessors.	Product Per Acre Estimated From Threshers' Re- turns.	Bushels.	Total Estimated For Product 1912.	Quality Com- pared With an Average.	Area of Winter and Spring as Returned by Township As- sessors.	Product Per Acre Estimated From Threshers' Re- turns.	Bushels.	Total Estimated For Product 1912.	Quality Com- pared With an Average.
Allen	11	9,901	7	69,307	74	14	27,426	41	1,124,466	88	1,624	18	29,232	94			
Auglaize	9	2,806	8	22,448	75	1	39,539	48	1,897,872	91	729	35	25,515	97			
Champaign	11	12,886	10	128,860	88	13	31,665	44	1,393,260	100	62	20	1,240	90			
Crawford	16	7,558	4	30,232	50	7	33,736	47	1,585,592	89	265	38	10,070	86			
Defiance	14	11,700	8	93,600	71	7	57,669	53	3,056,457	96	131	29	2,620	90			
Duane	9	604	7	4,228	90	5	41,332	53	2,190,596	98	1,435	31	44,485	96			
Delaware	9	9,950	7	69,650	78	7	14,318	41	607,538	102	11	20	280	100			
Fulton	6	3,419	10	34,190	75	3	33,191	51	1,692,741	83	2,232	35	78,120	89			
Hancock	15	9,112	4	36,448	63	3	36,490	49	1,786,010	90	997	32	30,944	96			
Hardin	9	3,992	7	27,944	61	13	24,212	44	1,065,928	83	149	25	3,785	90			
Henry	10	889	6	5,334	55	4	57,867	50	2,893,350	92	4,159	30	124,770	93			
Logan	11	5,624	10	56,240	86	24	30,425	45	1,369,125	101	734	26	19,084	95			
Lucas	6	658	2	1,318	5	5	23,452	51	1,196,052	90	2,884	33	95,172	94			
Marion	14	4,721	8	37,768	56	1	33,067	40	1,322,680	78	59	20	580	90			
Mercer	12	9,849	7	68,943	77	13	52,734	46	2,425,764	90	1,534	23	43,952	87			
Morrow	14	6,728	6	40,368	75	15	17,878	46	975,120	86	32	20	640	90			
Ottawa	11	1,355	5	5,895	58	16	23,748	41	713,668	95	2,637	31	81,747	98			
Paulding	11	3,527	6	21,762	55	8	46,000	48	3,100,800	89	519	28	14,532	85			
Putnam	11	5,430	4	21,720	35	2	48,831	43	2,343,868	89	4,908	36	147,240	90			
Sandusky	8	24,580	5	122,950	57	11	42,418	57	2,967,762	96	1,497	33	46,401	73			
Seneca	8	6,285	5	31,825	73	20	48,618	46	1,866,392	87	224	23	5,152	90			
Shelby	10	5,964	6	35,784	66	4	27,201	42	1,142,422	96	200	17	3,400	88			
Union	7	4,078	11	44,858	78	1	49,745	48	2,387,160	76	27	22	594	87			
Van Wert	10	3,813	4	15,252	72	4	32,391	49	1,587,159	105	1,354	33	44,682	102			
Williams	11	2,217	9	19,953	60	5	79,993	48	3,839,664	85	2,008	29	58,232	89			
Wood	16	5,616	5	28,080	38	3	28,891	43	1,246,613	87	55	17	935	78			
Wyandot	10	164,757	7	1,088,145	64	8	1,054,163	47	50,016,527	90	31,606	30	948,684	87			
Averages Totals	280

NORTHWEST SECTION—Concluded.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE
CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties	Rye.				Corn.			Potatoes.	Tobacco.	Pastures.	Apples.
	Areas as Returned by Township Assessors.	Product Per Acre Estimated From Threshers' Returns.	Bushels.	Total Estimated Product For 1912.	Quality Com- pared With an Average.	Cut Up For Rodder.	Date of Cutting Days After September 1st.	Probable Total Yield Com- pared With Last Year.	Prospect Com- pared With an Average.	Condition Com- pared With an Average.	Prospect Com- pared With Last Year.
					Per Cent.						
Allen	3,940	17	66,980	98	106	82	22	102	95	114	48
Auglaize	2,984	18	53,712	100	99	82	27	122	.....	114	38
Champaign	1,249	16	19,984	95	99	79	23	121	90	103	10
Crawford	325	20	6,500	93	101	71	27	97	100	103	96
Darke	3,263	15	48,945	94	95	67	26	125	96	104	11
Defiance	740	13	9,620	82	115	87	24	165	88	117	76
Delaware	901	16	14,416	94	96	73	21	124	100	103	21
Delaware	901	16	14,416	94	96	73	21	124	100	103	21
Fulton	300	17	5,100	85	101	80	23	132	.....	107	104
Hancock	1,714	16	27,424	93	110	87	20	135	.....	115	74
Hardin	3,994	16	63,904	89	107	62	24	101	60	108	62
Henry	349	25	8,725	96	121	74	21	178	100	100	80
Logan	658	20	52,820	96	95	82	28	104	97	100	24
Lucas	1,134	17	11,168	90	100	50	20	134	.....	96	125
Marion	1,384	16	18,144	85	93	73	24	96	100	102	51
Mercer	1,968	20	39,360	97	103	80	21	111	110	112	45
Morrow	1,201	17	20,417	95	97	70	24	115	80	101	75
Ottawa	227	23	5,221	98	99	69	24	99	.....	116	84
Paulding	905	30	27,150	95	105	50	23	136	100	99	82
Putnam	1,176	20	23,520	91	96	81	20	125	100	105	75
Sandusky	464	26	12,064	78	81	73	24	85	100	100	65
Seneca	244	20	4,880	93	99	80	24	116	150	96	83
Shelby	1,027	19	19,513	97	103	85	24	108	98	96	11
Union	1,912	12	22,944	100	106	86	23	126	.....	102	17
Van Wert	2,234	18	40,212	87	102	74	26	102	100	131	74
Williams	232	18	4,176	98	101	73	22	141	100	93	83
Wood	452	21	9,492	89	103	67	23	127	100	98	76
Wyandot	542	18	9,756	93	107	64	21	113	.....	111	77
Averages	.....	19	.....	93	101	73	Sept. 23	120	98	105	62
Totals	34,135	.....	646,165	.....	.....	.....	.....	.....	.....	.....	.....

AGRICULTURAL REPORT.

SOUTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE
CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

Counties.	Wheat.							Oats.				Barley.				
	Product Per Acre			Total Estimated Product For 1912.	Quality Com- pared With an Average.	Crop of 1911 Still in Pro- ducers' Hands.	Area as Re- turned by Township As- sessors.	Product Per Acre	Threshers' Re- turns.	Bushels.	Per Cent.	Area of Winter and Spring as Returned by Township As- sessors.	Product Per Acre	Threshers' Re- turns.	Bushels.	Per Cent.
	Estimated Area Harvested.	Bushels.	Bushels.													
Adams	12,107	8	96,856	86	7	4,091	27	110,457	102	14	280	90				
Brown	12,723	8	101,784	89	14	5,710	29	165,590	101	19	380	90				
Butler	30,063	9	270,567	76	3	13,964	37	516,668	98	1,015	28,420	86				
Clark	8,982	8	71,856	77	4	15,545	43	668,435	97	405	8,100	85				
Clermont	9,184	8	82,656	82	7	6,698	26	174,148	95	7	175	80				
Clinton	17,807	9	160,263	73	4	10,164	38	386,232	98	32	896	75				
Fayette	23,376	12	280,512	79	14	8,759	48	420,432	92	68	2,720	95				
Franklin	17,013	8	136,104	72	11	17,604	52	915,408	103	437	12,175	100				
Greene	7,578	9	68,202	76	9	1,460	45	65,700	94	229	6,412	90				
Hamilton	10,266	11	112,926	76	11	3,201	34	108,834	96	56	8,975	85				
Highland	30,026	10	300,260	88	11	3,826	30	1,335,334	100	191	1,120	95				
Madison	5,357	12	64,284	76	1	29,029	46	1,908,341	96	35	4,202	95				
Miami	8,740	8	69,920	86	3	22,897	45	1,030,365	101	140	700	95				
Montgomery	8,757	7	61,299	80	2	6,468	43	378,124	100	.....	.....	.....	
Pickaway	38,939	18	700,902	77	8	3,246	36	116,856	102	.....	.....	.....	
Pike	14,213	18	255,834	81	20	25,692	34	1,387,368	111	24	480	90				
Preble	23,931	18	191,448	75	20	2,835	35	99,225	91	68	1,360	85				
Ross	45,143	13	536,859	83	12	2,608	25	65,150	92	7	1,460	90				
Scioto	3,303	12	39,636	86	34	12,842	38	462,312	101	244	4,880	100				
Warren	10,632	12	127,584	77	10	.....	.....	.....	.....	.....	.....	.....
Averages .....	.....	11	3,779,752	80	10	237,240	44	10,329,759	98	3,400	85,195	91			
Totals	338,140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Number Reports Received.	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATE AVERAGES AND TOTALS.

Averages .....	.....	10	10,454,455	76	10	1,865,440	44	83,171,314	93	.....	29	1,077,549	89
Totals	969	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SOUTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCT OF WHEAT, OATS, BARLEY AND RYE AND THE CONDITION OF OTHER CROPS, OCTOBER 1, 1912.

County.	Rye.					Corn.		Potatoes.	Tobacco.	Pastures.	Apples.		
	Area as Returned by Township Assessors.	Product Per Acre Estimated From Threshers' Returns.	Bushels.	Bushels.	Total Estimated Product For 1912.	Quality Compared With an Average.	Prospect Compared With an Average.	Cut Up For Podder.	Date of Cutting, For Podder, Days After September 1st.	Probable Total Yield Compared With Last Year.	Prospect Compared With an Average.	Condition Compared With an Average.	Prospect Compared With Last Year.
Acres.	Bushels.	Bushels.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Days.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Adams	1,822	25	45,550	99	105	58	22	129	90	102	84		
Brown	4,463	10	44,830	95	97	55	29	113	90	108	33		
Butler	940	16	15,040	101	94	30	37	157	87	116	28		
Clark	2,574	16	41,184	80	98	62	24	111	75	99	19		
Clermont	2,008	12	24,096	92	82	51	33	134	97	107	22		
Clinton	2,815	17	47,855	95	93	73	22	209	.....	103	13	
Fayette	1,125	21	23,625	94	96	68	29	102	.....	97	14	
Franklin	814	17	13,838	96	98	84	22	121	.....	105	9	
Greene	2,436	18	43,848	98	120	73	22	119	.....	112	24	
Hamilton	449	16	7,184	98	92	64	29	127	.....	95	104	
Highland	2,546	12	30,552	98	96	74	23	130	.....	91	18	
Madison	932	12	11,184	92	96	76	24	99	.....	95	12	
Miami	768	14	10,752	88	101	59	23	105	.....	94	11	
Montgomery	1,473	16	23,568	94	108	67	26	113	.....	108	26	
Pickaway	482	22	10,604	98	93	67	24	100	.....	94	10	
Pike	228	28	6,384	98	108	87	23	180	.....	107	59	
Preble	1,562	22	34,364	103	113	44	27	146	.....	93	129	
Ross	2,007	12	24,084	93	101	78	26	123	.....	90	104	
Scioto	218	13	2,834	95	104	83	25	134	.....	86	89	
Warren	1,826	13	23,738	97	96	70	26	153	.....	83	27	
Averages	15	95	99	66	Sept. 25	90	106	29	
Totals	31,488	484,914	

STATE AVERAGES AND TOTALS.

Averages .....	.....	17	.....	93	96	68	Sept. 25	.....	.....	94	107	63
Totals	85,624	.....	1,451,389	.....	.....	.....	.....	.....	.....	.....	.....	.....

Official Report

OF THE

Ohio Department of Agriculture

ON THE

Condition of Crops, November 1, 1912

The following report is computed from returns received from the official correspondents of the Department:

WHEAT—Area sown last fall returned by township assessors	1,777,862 acres
“ —Sown this fall compared with last year	94 per cent.
“ —Estimated area seeded for harvest of 1913	1,669,656 acres
“ —Condition compared with an average	98 per cent.
“ —Average date of seeding	September 28
ALFALFA—Area in 1911 returned by township assessors	27,139 acres
“ —Area compared with last year	91 per cent.
“ —Estimated area in 1912	26,756 acres
“ —Total tons produced per acre from all cuttings	3 tons
“ —Total estimated product for 1912	88,211 tons
“ —Number of cuttings this year	3
RYE—Area sown last fall returned by township assessors	88,533 acres
“ —Sown this fall compared with last year	110 per cent.
“ —Estimated area seeded for the harvest of 1913	97,664 acres
“ —Condition compared with an average	98 per cent.
SUGAR BEETS—Estimated area for 1911	6,443 acres
“ “ —Estimated area for 1912	7,438 acres
“ “ —Total estimated production for 1912	81,343 tons
“ “ —Total yield compared with 1911	92 per cent.
CORN—Prospect compared with an average	100 per cent.
BUCKWHEAT—Prospect compared with an average	96 per cent.
CLOVER SEED—Prospect compared with an average	70 per cent.
POTATOES—Area planted returned by township assessors	103,262 acres
“ —Average production per acre	112 bushels
“ —Total estimated production for 1912	11,604,902 bushels
“ —Affected by rot	5 per cent.
HOGS—Condition compared with an average	94 per cent.
“ —Number to be fattened compared with 1911	84 per cent.

Per bushel—	STATE AVERAGE PRICES.	
Wheat	-----	\$1 01
Corn	-----	59
Barley	-----	68
Oats	-----	35
Rye	-----	80
Potatoes	-----	52

Per ton—

Hay	\$13 46
Alfalfa	16 20
Sugar Beets	4 96

In the official October report issued by this Department mention was made of the fact that many correspondents reported a small wheat acreage being seeded. The figures contained in this report show that in comparison with the original area seeded for the 1912 harvest the present acreage is but 94 per cent. However, 44 per cent. of the wheat area sown last year was abandoned in the spring, and but 1,079,894 acres remained for the harvest just past. The present estimated area seeded for the 1913 harvest is reported at 1,669,656 acres. Much of the wheat was sown late, but its growing condition generally is excellent. The State average is estimated at 98 per cent.

Alfalfa figures show an average production of three tons per acre, with an estimated production for the State as a whole of 88,211 tons. This is a substantial increase over the production of last year.

The area seeded to rye shows an increase of 10 per cent. in comparison with the area of last year, as reported by township assessors. Its growing condition is the same as wheat—98 per cent.

Corn prospects are excellent. The estimated acreage planted is 3,197,884 acres. From present prospects this should produce approximately 112,000,000 bushels. Favorable weather has prevailed during the fall, and cribbing is in progress with the crop in fine condition.

For the first time in the Department's history figures are presented herein reference to sugar beets. The report shows that the total estimated production for 1912 was 81,343 tons. This is a decline of eight per cent. in comparison with the production of 1911.

While the potato area is considerably less than last year, the average production per acre exceeds that crop by fifty bushels. The total State production is estimated at 11,604,902 bushels. On the corresponding date one year ago the State production was estimated at 8,161,203 bushels. The present average production per acre is 112 bushels.

Hogs are being rushed to market, owing to prevalence of cholera, and this, in conjunction with the scarcity of feeding cattle, will cause an unusual amount of corn to be marketed early.

NORTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Wheat.					Alfalfa.						
	Area Sown Last Fall as Returned by Assessors.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Com- pared With an Average.	When Sown Days After Sept. 15.	Area in 1911 as Returned by Assessors.	Area Compared With Last Year.	Estimated Area in 1912.	Total Tons Pro- duced per Acre From All Cut-	Tons.	Total Estimated Product for 1912.	Number of Cut- tings This Year.
Number.	Acres.	Per Cent.	Acres.	Per Cent.	Days.	Acres.	Per Cent.	Acres.	Tons.	Tons.		
Ashland	23,115	91	21,635	94	8	2	85	2	2.5	5	3	
Ashtabula	7,408	97	7,186	100	5	16	95	15	2.6	39	3	
Carroll	13,289	104	13,820	111	6	14	113	16	2.8	45	3	
Columbiana	18,474	110	20,321	103	8	47	105	49	3.6	176	3	
Coshocton	23,791	104	24,743	102	12	249	101	251	3.0	753	4	
Cuyahoga	5,916	140	8,282	107	7	13	95	12	2.8	34	3	
Erie	14,908	94	13,914	98	9	289	112	324	4.1	1,323	3	
Geauga	4,249	93	3,952	100	4	16	100	16	3.0	48	3	
Harrison	9,665	101	9,762	105	5	183	124	227	3.8	686	3	
Holmes	24,338	98	23,851	108	8	46	107	49	2.8	137	3	
Huron	30,427	95	28,906	100	9	142	111	158	3.9	521	3	
Jefferson	10,418	101	10,522	97	11	146	107	156	3.6	562	3	
Knox	27,116	100	27,116	100	9	254	96	247	3.5	865	3	
Lake	3,053	92	2,800	95	9	84	135	113	3.0	339	3	
Lorain	10,975	209	22,938	108	11	13	86	11	2.8	31	3	
Mahoning	10,400	113	11,752	96	11	91	87	79	4.0	316	3	
Medina	14,489	140	20,299	96	9	47	135	63	5.0	315	3	
Portage	16,617	99	16,451	101	9	20	107	21	4.5	95	3	
Richland	29,332	103	30,212	97	7	27	61	16	3.8	41	3	
Stark	38,944	99	38,555	95	7	57	108	62	3.9	242	3	
Summit	16,669	99	16,502	101	7	37	101	37	2.8	104	3	
Trumbull	7,213	99	7,141	99	10	37	101	37	2.8	104	3	
Tuscarawas	20,983	102	21,418	108	6	45	109	49	2.8	186	3	
Wayne	38,458	103	39,612	104	10	29	100	29	4.0	116	3	
Averages	420,267	105	441,094	101	Sept. 23	1,867	107	2,002	3.5	6,954	3	
Totals	38,944	111	39,612	111	12	289	107	324	4.5	1,398	4	
Maximum	3,053	94	2,800	94	4	2	100	2	2.5	5	3	
Minimum												

NORTHEAST SECTION—Continued.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Rye.				Sugar Beets.				Corn.	Buck- wheat.	Clover Seed.	
	Area Sown Last Season.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Com- pared With an Average.	Area, 1911.	Area, 1912.	Average Tons per Acre.	Total Estimated Product for 1912.				Yield Compared With 1911.
	Acres.	Per Cent.	Acres.	Per Cent.	Acres.	Acres.	Tons.	Tons.	Per Cent.	Per Cent.	Per Cent.	
Ashland	1,212	124	1,503	93	.....	.....	.....	.....	.....	90	99	73
Ashtabula	699	84	587	99	.....	.....	.....	.....	.....	100	103	111
Carroll	121	101	122	100	.....	.....	.....	.....	.....	101	99	88
Columbiana	281	98	275	106	.....	.....	.....	.....	.....	95	82	69
Coshocton	744	114	848	93	.....	.....	.....	.....	.....	107	95	56
Cuyahoga	216	99	214	100	.....	.....	.....	.....	.....	88	108	76
Erie	646	99	640	95	.....	.....	.....	.....	.....	101	97	74
Geauga	177	100	177	105	.....	.....	.....	.....	.....	101	94	88
Harrison	157	90	141	100	.....	.....	.....	.....	.....	104	100	69
Holmes	362	117	424	101	.....	.....	.....	.....	.....	96	97	85
Huron	122	158	193	98	.....	.....	.....	.....	.....	100	94	65
Jefferson	446	97	433	91	.....	.....	.....	.....	.....	99	104	47
Knox	2,100	107	2,247	100	.....	.....	.....	.....	.....	103	90	56
Lake	404	93	376	96	.....	.....	.....	.....	.....	93	97	89
Lorain	93	130	121	96	.....	.....	.....	.....	.....	77	.....	85
Mahoning	151	99	149	94	.....	.....	.....	.....	.....	94	89	60
Medina	148	111	164	94	.....	.....	.....	.....	.....	85	83	42
Portage	74	82	82	98	.....	.....	.....	.....	.....	87	102	82
Richland	1,677	107	1,794	99	.....	.....	.....	.....	.....	97	100	56
Stark	214	93	199	96	6	5	15	75	95	85	96	74
Summit	147	87	128	96	.....	.....	.....	.....	.....	71	88	75
Trumbull	144	89	128	94	.....	.....	.....	.....	.....	85	101	107
Tuscarawas	607	92	558	104	.....	.....	.....	.....	.....	108	95	79
Wayne	183	161	295	100	.....	.....	.....	.....	.....	92	101	82
Averages	.....	106	.....	98	6	5	15	75	95	98	92	74
Totals	11,123	.....	11,798	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	2,100	.....	2,247	106	.....	.....	.....	.....	.....	108	108	111
Minimum	74	.....	82	91	.....	.....	.....	.....	.....	71	82	47

NORTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Potatoes.			Hogs.	Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	Alfalfa.	Sugar Beets.			
	Area Planted as Township As- sessors.	Average Product per Acre.	Total Product for 1912.											Affected by Rot.	Condition Com- pared With an Average.	Number to be Fattened Com- pared With 1911.
Ashland	786	139	109,254	8	93	76	\$1 04	\$0 56	\$0 68	\$0 33	\$0 72	\$0 43	\$13 30			
Ashtabula	3,592	138	495,696	10	99	104	1 01	76		34	83	42	12 50			
Carroll	557	121	67,397	9	96	81	1 01	69	75	40	91	52	14 00			
Columbiana	3,497	120	419,640	9	95	93	98	73		39	86	52	15 20			
Coshocton	1,187	128	151,936	5	97	86	1 01	53		36	88	51	11 77			
Cuyahoga	5,783	104	601,432	18	102	94	1 09	78		40	85	62	20 00			
Erie	3,502	118	413,236	5	97	90	1 04	66	70	32	78	40	15 20			
Geauga	2,837	103	292,211	11	100	87	1 05	75		36		48	14 44			
Harrison	143	134	19,162	7	93	73	1 00	70		40	91	62	12 70	14 00		
Holmes	660	95	62,700	8	104	39	1 03	65	75	33	77	44	12 37			
Huron	1,528	118	180,304	5	98	89	1 03	61	51	31	74	38	14 18			
Jefferson	506	100	50,600	13	93	88	1 00	72	70	43	94	63	15 25			
Knox	517	121	62,557	4	93	86	1 01	52		36	83	46	12 50	15 00		
Lake	1,591	114	181,374	9	100	91	1 09	74	75	35	100	51	17 25	17 50		
Lorain	3,125	112	350,000	12	94	89	1 05	75		38	88	52	14 62			
Mahoning	2,384	121	288,464	16	99	84	1 07	73	80	39	89	42	14 58	20 00		
Medina	3,138	84	263,592	11	93	81	1 04	61		32	88	41	15 73	20 00		
Portage	5,334	79	422,966	13	100	91	1 03	66		36	79	44	14 00	20 00		
Richland	2,094	125	261,750	5	89	77	1 03	62	60	32	72	44	14 00	20 00		
Stark	4,547	104	472,888	7	95	87	1 04	68	88	37	91	50	14 28	20 50		
Summit	3,963	93	312,759	8	96	91	1 05	67	75	37	94	65	17 08	21 50		
Trumbull	3,190	115	366,850	18	98	90	1 05	67	60	37	82	52	16 06	25 00		
Tuscarawas	1,602	98	156,996	6	87	82	94	63		37	84	51	13 36	37 00		
Wayne	3,516	112	393,680	9	103	88	1 05	68	70	32	87	42	13 80	12 00		
Averages	58,999	109	6,397,444	9	97	87	\$1 03	\$0 67	\$0 72	\$0 36	\$0 84	\$0 49	\$14 64	\$17 47		
Totals																
Maximum	5,783	139	601,432	18	104	104	\$1 09	\$0 78	\$0 90	\$0 43	\$1 00	\$0 65	\$20 00	\$25 00		
Minimum	143	79	19,162	4	89	73	94	52	51	31	70	38	11 77	10 00		

SOUTHEAST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Wheat.						Alfalfa.					
	Reports Received.	Area Sown Last Fall as Returned by Assessors.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Compared With an Average.	When Sown Days After Sept. 15.	Area in 1911 as Returned by Township Assessors.	Area Compared With Last Year.	Estimated Area in 1912.	Total Tons Produced per Acre From All Cuttings.	Total Estimated Product for 1912.	Number of Cuttings This Year.
	Number.	Acres.	Per Cent.	Acres.	Per Cent.	Days.	Acres.	Per Cent.	Acres.	Tons.	Tons.	Number.
Athens	8	7,715	104	2,024	97	20	848	98	831	3.8	3,158	4
Belmont	18	15,217	102	15,521	98	9	119	108	129	3.8	490	3
Fairfield	13	49,817	102	50,813	96	16	69	85	59	3.0	177	3
Gallia	19	9,625	86	8,277	85	27	55	88	48	3.0	144	3
Guernsey	13	11,925	103	12,283	96	14	69	150	104	2.6	270	3
Hocking	15	11,123	108	11,790	99	18	82	98	80	3.0	240	3
Jackson	7	7,452	104	7,750	99	19	43	100	43	3.0	129	3
Lawrence	11	2,348	98	2,207	94	13	2	105	2	2.8	6	3
Licking	24	32,419	98	31,771	94	14	149	95	142	3.0	426	3
Meigs	8	10,267	100	10,267	95	24	27	105	28	3.0	84	3
Monroe	10	13,147	101	13,278	105	11	13	118	15	2.0	30	3
Morgan	12	11,504	105	12,079	98	20	199	100	199	3.3	657	3
Muskingum	18	23,729	104	24,678	97	16	276	109	300	3.7	1,110	3
Noble	17	10,593	109	11,546	99	16	136	110	150	3.8	570	3
Perry	12	16,939	105	17,786	97	19	14	100	14	3.0	42	3
Vinton	8	6,750	103	6,952	96	21	4	100	4	3.6	842	3
Washington	15	17,743	104	18,453	90	17	215	109	234	3.6	842	4
Averages	208	258,313	102	263,475	95	Oct. 1	2,320	103	2,382	3.5	8,387	3
Totals	24	49,817	105	50,813	105	27	848	103	831	3.8	3,158	4
Maximum	5	2,348	82	2,207	82	9	2	100	2	2.0	6	2
Minimum												

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.					
Averages	993	1,777,862	94	1,669,656	98
Totals	24	59,905	130	60,504	130
Maximum	3	2,348	82	2,207	82
Minimum					

Averages	993	1,777,862	94	1,669,656	98
Totals	24	59,905	130	60,504	130
Maximum	3	2,348	82	2,207	82
Minimum					

SOUTHEAST SECTION—Continued.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Rye.			Sugar Beets.			Corn.		Buck-wheat.		Clover Seed.	
	Area Sown Last Fall as Returned by Assessors.	Sown This Fall Compared With Last Year.	Estimated Area Reaped for the Harvest of 1913.	Condition Compared With an Average.	Area, 1911.	Area, 1912.	Average Tons per Acre.	Tons.	Yield Compared With 1911.	Prospect Compared With an Average.	Prospect Compared With an Average.	Per Cent.
	Acres.	Per Cent.	Acres.	Per Cent.	Acres.	Acres.	Tons.	Tons.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Athens	131	102	134	99	.....	.....	.....	.....	.....	105	93	89
Belmont	726	100	726	95	.....	.....	.....	.....	.....	106	93	100
Fairfield	555	85	472	100	.....	.....	.....	.....	.....	103	88	41
Gallia	807	82	682	83	.....	.....	.....	.....	.....	103	.....	78
Guernsey	510	113	576	95	.....	.....	.....	.....	.....	105	102	68
Hocking	148	95	141	93	.....	.....	.....	.....	.....	101	91	44
Jackson	224	93	208	88	.....	.....	.....	.....	.....	83	92	80
Lawrence	164	102	167	98	.....	.....	.....	.....	.....	104	95	63
Licking	3,149	107	3,369	95	.....	.....	.....	.....	.....	101	90	44
Meigs	211	104	219	100	.....	.....	.....	.....	.....	102	101	109
Monroe	826	114	942	98	.....	.....	.....	.....	.....	105	98	88
Morgan	128	99	137	96	.....	.....	.....	.....	.....	110	95	91
Muskingum	578	103	595	96	.....	.....	.....	.....	.....	110	95	90
Noble	278	101	281	103	.....	.....	.....	.....	.....	113	94	107
Perry	313	91	285	97	.....	.....	.....	.....	.....	101	102	72
Vinton	91	54	48	98	.....	.....	.....	.....	.....	104	97	97
Washington	307	93	286	99	.....	.....	.....	.....	.....	111	89	85
Averages	.....	101	.....	96	.....	.....	.....	.....	.....	104	94	78
Totals	9,146	.....	9,239	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	3,149	.....	3,369	101	.....	.....	.....	.....	.....	113	102	109
Minimum	91	.....	49	83	.....	.....	.....	.....	.....	89	88	44

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	.....	110	97,644	98	6,443	7,438	11	81,343	92	100	96	70
Totals	88,533	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	4,463	.....	6,695	130	1,874	1,675	15	20,100	115	120	125	115
Minimum	74	.....	49	83	6	5	5	75	75	71	80	29

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Potatoes.				Hogs.		Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	Alfalfa.	Sugar Beets.
	Area Planted as Township As- sessors.	Average Product per Acre.	Total Estimated Product for 1912.	Affected by Rot.	Condition Com- pared With an Average.	Number to be Fattened Com- pared With 1911.									
							Per Cent.	Per Cent.	Per Cent.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Ton.
		Acres.	Bushels.	Bushels.	Per Cent.	Per Cent.	Per Cent.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Ton.	Price per Ton.
Athens	462	103	47,586	2	99	88	\$0 99	\$0 54	.....	\$0 38	\$0 88	\$0 53	\$12 75	\$12 66	.....
Belmont	643	89	57,227	3	100	84	1 00	61	\$1 00	42	14 50	63	14 50	15 80	.....
Fairfield	537	132	70,384	3	95	80	1 01	53	.....	34	74	62	11 72	15 00	.....
Gallia	150	96	14,400	3	93	71	1 01	52	.....	38	93	57	13 75	14 00	.....
Guernsey	153	112	17,136	3	92	86	98	62	.....	40	86	82	14 46	18 00	.....
Hocking	509	160	81,440	4	99	90	99	53	.....	42	95	86	11 20	11 00	.....
Jackson	101	136	13,736	2	97	74	1 01	56	.....	43	83	59	13 43	.....	.....
Lawrence	277	113	31,301	6	96	71	99	57	80	39	97	61	14 80	18 50	.....
Licking	728	111	80,808	3	99	78	99	52	.....	40	86	54	14 45	12 50	.....
Meigs	460	81	37,260	2	99	89	1 03	54	.....	38	96	53	13 37	16 50	.....
Monroe	885	140	123,900	4	99	84	1 01	57	.....	40	92	46	12 75	15 00	.....
Morgan	175	88	15,400	2	99	79	1 00	69	.....	39	96	65	12 36	14 78	.....
Muskingum	625	129	80,625	3	96	84	1 02	56	90	38	96	60	13 83	20 00	.....
Noble	454	137	62,198	4	96	86	1 02	57	88	41	95	55	12 70	18 00	.....
Perry	434	85	36,890	5	102	89	99	59	.....	37	79	60	12 54	.....	.....
Vinton	215	96	20,640	4	99	90	97	51	.....	38	93	53	12 00	.....	.....
Washington	1,437	108	160,596	3	99	85	99	56	.....	42	89	51	13 13	13 60	.....
Averages	8,295	115	952,027	3	98	83	\$1 00	\$0 56	\$0 90	\$0 39	\$0 90	\$0 58	\$13 16	\$15 38	.....
Totals .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	1,437	160	160,596	6	102	90	\$1 03	\$0 69	\$1 00	\$0 43	\$0 97	\$0 66	\$14 80	\$20 00	.....
Minimum	101	81	13,736	2	92	71	97	51	80	34	74	46	11 20	11 00	.....

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	112	112	11,604,902	5	94	84	\$1 01	\$0 59	\$0 68	\$0 35	\$0 80	\$0 52	\$13 46	\$16 20	\$4 96
Totals	103,262	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	5,783	170	601,432	18	104	104	\$1 09	\$0 78	\$1 00	\$0 43	\$1 00	\$0 78	\$20 00	\$25 00	\$5 50
Minimum	10	79	1,100	0	73	68	93	46	40	29	60	30	10 80	10 00	4 00

NORTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

AGRICULTURAL REPORT.

Counties.	Wheat.						Alfalfa.					
	Reports Received.	Area Sown Last Fall as Returned by Assessors.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Compared With an Average.	When Sown Days After Sept. 15.	Area in 1911 as Returned by Township Assessors.	Area Compared With Last Year.	Estimated Area in 1912.	Tons, Produced per Acre From All Cuttings.	Tons.	Number.
Allen	13	21,065	77	16,220	91	11	291	87	253	4.0	1,012	3
Auglaize	10	28,056	66	18,517	97	15	321	87	279	3.0	837	3
Champaign	12	23,439	85	19,915	91	11	1,195	93	1,111	3.0	3,333	3
Crawford	16	21,592	90	19,433	95	10	29	115	33	3.0	99	3
Darke	14	38,999	78	30,419	100	11	263	98	258	3.0	774	3
Defiance	10	20,127	68	13,686	95	17	155	85	132	2.8	370	3
Delaware	12	16,047	89	14,292	95	15	459	95	436	2.6	1,134	3
Fulton	8	16,280	82	13,350	98	13	636	116	738	3.0	2,214	3
Hancock	14	29,393	60	17,636	99	13	131	60	79	3.0	237	3
Hardin	9	9,282	69	6,405	94	9	294	96	282	3.0	847	3
Henry	11	17,761	67	11,900	98	9	96	115	110	4.0	440	3
Logan	13	12,220	87	10,631	93	15	1,985	85	1,687	3.0	5,061	3
Lucas	9	9,399	76	7,143	104	4	861	94	809	3.0	2,427	3
Marion	11	13,488	76	10,251	90	11	34	106	36	4.3	1,155	3
Mercer	12	26,617	75	19,963	97	12	300	77	231	3.1	716	3
Morrow	14	14,016	88	12,334	100	12	75	92	69	4.0	276	3
Ottawa	8	10,555	73	7,705	100	8	739	119	879	3.4	2,989	3
Paulding	10	5,543	95	5,266	99	7	64	114	73	3.4	234	3
Putnam	11	22,043	61	13,446	91	15	53	87	49	3.5	172	3
Sandusky	6	33,937	59	20,023	100	15	315	87	274	4.0	1,096	3
Seneca	13	50,183	94	47,172	97	9	296	97	287	3.2	918	3
Shelby	12	24,092	81	19,517	99	9	137	99	136	3.3	449	3
Union	12	11,927	90	10,734	96	15	685	100	685	2.7	1,850	3
Van Wert	6	9,708	73	7,087	91	8	73	102	74	3.4	1,252	3
Williams	11	18,156	82	14,788	102	4	237	93	220	3.0	660	3
Wood	13	14,774	62	9,160	99	9	680	98	666	2.1	2,065	3
Wyandot	11	23,396	66	15,441	93	13	122	100	122	2.5	305	3
Averages	.....	541,688	76	412,424	96	Sept. 25	10,526	95	.....	3.1	30,922	3
Totals	301	.....	.....	.....	.....	.....	.....	.....	10,008	.....	.....	.....
Maximum	16	50,183	.....	47,172	104	15	1,985	.....	1,687	4.0	5,061	4
Minimum	6	5,543	.....	5,266	90	3	29	.....	33	2.5	99	3

NORTHWEST SECTION—Continued.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

CROP AND OTHER STATISTICS.

69

Counties.	Rye.				Sugar Beets.				Corn.		Buck-wheat.		Clover Seed.	
	Area Sown Last Season.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Compared With an Average.	Area, 1911.	Acres.	Area, 1912.	Average Tons per Acre.	Total Estimated Product for 1912.	Yield Compared With 1911.	Per Cent.	Per Cent.	Prospect Compared With an Average.	Per Cent.
	Acres.	Per Cent.	Acres.	Per Cent.	Acres.	Acres.	Acres.	Tons.	Tons.	Per Cent.	Per Cent.	Per Cent.	Prospect Compared With an Average.	Per Cent.
Allen	3,940	108	4,255	100	.....	.....	.....	.....	.....	.....	.....	107	.....	66
Auglaize	2,984	123	3,670	99	.....	200	.....	.....	2,000	.....	.....	113	100	65
Champaign	1,249	97	1,212	94	.....	.....	.....	10	.....	.....	.....	97	.....	60
Crawford	325	124	403	99	80	.....	.....	6	480	90	.....	100	85	65
Dark	3,263	104	3,557	97	10	40	.....	.....	320	.....	.....	109	.....	47
Defiance	740	104	770	95	1,100	1,675	.....	12	20,100	95	.....	112	80	76
Delaware	901	136	1,225	99	50	50	.....	5	250	100	.....	109	100	37
Fulton	300	98	294	103	.....	.....	.....	.....	.....	.....	.....	109	95	68
Harcock	1,714	181	2,760	96	180	160	.....	10	1,600	.....	.....	111	100	61
Hardin	3,994	110	4,393	98	.....	.....	.....	.....	.....	.....	.....	105	125	54
Henry	349	107	401	107	95	175	.....	12	2,100	106	.....	110	97	85
Logan	2,641	115	3,037	100	.....	.....	.....	.....	.....	.....	.....	102	84	79
Lucas	1,658	103	3,658	103	.....	.....	.....	.....	.....	.....	.....	104	107	38
Marion	1,558	107	1,913	95	100	110	.....	12	1,480	85	.....	85	.....	79
Mercer	1,968	132	2,536	97	210	310	.....	11	1,150	95	.....	107	.....	41
Morrow	1,201	113	1,381	99	.....	.....	.....	.....	3,410	87	.....	.....	.....	68
Ottawa	227	105	345	100	66	.....	.....	.....	.....	.....	.....	98	90	74
Paulding	905	91	824	101	1,874	1,486	.....	8	2,304	93	.....	100	96	74
Putnam	1,176	96	1,128	94	1,282	1,913	.....	11	14,666	100	.....	113	107	87
Sandusky	464	180	603	130	20	10	.....	13	10,043	83	.....	101	98	58
Seneca	244	98	239	99	.....	.....	.....	.....	130	115	.....	103	.....	69
Shelby	1,027	106	1,089	98	.....	.....	.....	.....	.....	.....	.....	105	102	62
Union	1,912	102	1,950	100	.....	.....	.....	.....	.....	.....	.....	104	100	71
Van Wert	2,234	108	2,413	94	275	585	.....	11	6,485	75	.....	106	100	46
Williams	232	151	281	98	315	216	.....	11	2,376	97	.....	102	100	53
Wood	452	89	680	100	680	1,040	.....	12	12,480	94	.....	100	101	71
Wyandot	542	103	558	95	.....	.....	.....	.....	.....	.....	.....	98	90	58
Averages	36,776	113	41,559	99	6,437	7,433	.....	11	81,268	92	.....	104	98	64
Totals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	3,994	.....	4,393	180	1,874	1,675	.....	13	20,100	115	.....	113	125	100
Minimum	227	.....	239	88	10	10	.....	5	130	75	.....	95	80	37

NORTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Potatoes.				Hogs.		Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	Alfalfa.	Sugar Beets.
	Area Planted as settlements.	Average Product per Acre.	Total Estimated Product for 1912.	Affected by Rot.	Condition Com- pared With an Average.	Number to be Fattened Com- pared With 1911.									
Allen	554	127	70,358	3	92	88	\$1 03	\$0 59	\$0 59	\$0 30	\$0 66	\$0 42	\$12 77	\$13 90	\$5 00
Auglaize	852	105	89,460	5	89	82	1 01	52	63	29	66	41	11 61	11 75	5 00
Champaign	214	122	26,108	3	79	70	97	53	65	30	69	40	10 80	12 00	
Crawford	1,817	108	196,236	3	91	84	1 03	56	68	30	76	42	13 78		
Darke	1,128	106	119,568	2	91	78	1 03	58	40	31	67	43	15 08	15 60	5 00
Defiance	655	114	74,670	1	92	89	1 02	58	52	28	62	34	13 38	15 00	4 75
Delaware	444	105	46,620	3	90	83	1 00	52		33	61	38	12 50	13 00	
Fulton	565	154	87,010	1	98	86	1 04	65	58	31	68	36	13 71	16 50	4 50
Hancock	718	143	102,674	3	96	89	1 04	55	43	30	64	43	11 92	12 50	5 00
Hardin	829	138	114,402	6	88	72	1 03	53	50	30	65	37	11 60	13 50	5 16
Henry	599	146	87,454	4	100	90	1 03	53	55	31	65	43	13 20	17 50	
Logan	456	120	54,720	8	86	84	1 04	56	56	30	69	32	10 87	12 75	5 00
Lucas	2,994	156	427,060	3	100	96	1 04	56	50	32	77	44	17 00	16 33	5 00
Marion	661	113	74,693	14	98	88	1 06	52	56	31	66	47	12 23	13 00	5 00
Mercer	541	134	73,484	6	96	88	1 01	55	57	29	65	47	12 08	13 00	5 00
Morrow	749	110	82,380	6	98	91	1 01	50		30	77	44	11 77	11 00	5 00
Ottawa	655	85	55,675	7	93	82	1 04	60	58	33	68	39	14 23	18 50	5 00
Paulding	228	124	28,272	1	88	84	1 02	48	63	30	66	42	12 78	14 00	5 00
Putnam	621	160	99,360	2	89	84	1 02	57	53	31	65	38	12 65	12 60	5 00
Sandusky	2,102	133	279,566	5	80	75	1 05	58	75	31	73	39	12 00	16 50	5 00
Seneca	1,355	145	196,475	2	93	86	1 03	59	60	30	74	38	12 85	13 00	5 00
Shelby	726	151	109,626	4	92	85	1 03	61	85	30	65	45	13 64	15 66	
Union	152	111	16,872	3	92	83	1 02	51		33	75	54	11 08	13 43	
Van Wert	952	112	106,624	3	90	82	1 02	51	61	30	66	45	13 50	15 00	5 50
Williams	356	170	60,520	1	100	94	1 02	52	57	31	69	30	12 91	14 00	5 30
Wood	838	113	94,694	3	91	90	1 02	59	57	32	72	43	14 31	14 29	5 00
Wyandot	446	116	51,736	4	91	80	1 02	52	50	30	69	40	12 18		5 00
Averages	22,207	129	2,865,341	4	92	85	\$1 01	\$0 55	\$0 60	\$0 31	\$0 69	\$0 43	\$12 81	\$14 24	\$4 96
Totals															
Maximum	2,994	170	467,064	14	100	96	\$1 05	\$0 65	\$0 85	\$0 33	\$0 91	\$0 58	\$17 00	\$18 50	\$5 50
Minimum	152	85	16,872	1	79	70	\$1 93	\$0 48	\$0 40	\$0 29	\$0 60	\$0 30	10 80	11 00	4 00

SOUTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Wheat.						Alfalfa.					
	Reports Received.	Area Sown Last Fall as Returned by Assessors.	Sown This Fall Compared With Last Year.	Estimated Area Seeded for the Harvest of 1913.	Condition Compared With an Average.	When Sown Days After Sept. 15.	Area in 1911 as Returned by Townships As seasons.	Area Compared With Last Year.	Estimated Area in 1912.	Total Tons Produced per Acre From All Cuttings.	Tons.	Number of Cuttings This Year.
	Number.	Acres.	Per Cent.	Acres.	Per Cent.	Days.	Acres.	Per Cent.	Acres.	Tons.	Tons.	Number.
Adams	9	13,452	110	14,797	99	25	157	87	137	3.0	411	3
Brown	10	13,535	108	14,618	130	17	104	105	109	2.8	305	3
Butler	9	45,549	102	46,460	101	15	1,089	105	1,143	3.8	4,343	3
Clark	7	24,949	96	25,951	89	19	524	106	555	3.0	1,665	3
Clermont	8	9,982	130	12,977	103	23	974	89	867	3.3	2,861	3
Clinton	11	32,975	99	32,645	98	16	272	98	267	3.5	934	3
Fayette	3	33,393	106	35,397	91	15	226	100	226	3.7	836	3
Franklin	18	25,776	100	25,776	98	12	512	99	507	3.6	1,325	3
Greene	5	34,441	92	31,686	96	23	940	100	940	3.3	3,102	3
Hamilton	6	11,799	104	12,271	102	18	2,024	102	2,064	3.2	6,604	3
Highland	12	33,737	104	35,086	95	23	466	101	471	3.6	1,695	3
Madison	11	19,839	82	16,268	95	20	395	112	442	3.0	1,326	4
Miami	9	31,211	88	27,466	98	8	290	108	313	2.9	907	3
Montgomery	10	25,018	86	21,515	89	20	1,491	102	1,517	3.4	5,157	3
Pickaway	11	59,905	101	60,504	99	25	117	99	211	3.1	654	4
Pike	8	14,503	115	16,678	99	10	733	108	740	5.0	830	3
Preble	8	41,984	91	38,205	101	22	825	82	685	3.2	2,812	3
Ross	11	49,068	96	47,105	91	20	835	82	685	3.2	2,192	3
Schoto	13	13,857	107	14,327	97	21	298	101	301	4.1	1,234	3
Warren	8	22,621	108	24,431	121	14	766	97	743	3.3	2,455	3
Averages	187	537,594	99	552,663	99	Oct. 1	12,426	100	12,364	3.4	41,948	3
Totals	187	537,594	99	552,663	99	Oct. 1	12,426	100	12,364	3.4	41,948	3
Maximum	18	59,905	130	60,504	130	25	2,024	108	2,064	5.0	6,604	4
Minimum	3	9,982	89	12,271	89	6	104	82	109	2.8	305	2

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	94	1,669,656	98	Sept. 28	91	27,139	2,024	2,064	2,064	3.1	88,211	3
Totals	993	1,777,862	130	27	130	2,024	2,024	2,064	2,064	5.0	6,604	4
Maximum	24	59,905	82	3	82	2	2	2	2	2.0	5	2
Minimum	3	2,348	82	3	82	2	2	2	2	2.0	5	2

SOUTHWEST SECTION—Continued.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Rye.				Sugar Beets.				Corn.		Buck-wheat.		Clover Seed.	
	Area Sown Last Season.	Area Sown This Fall Compared With Last Year.	Estimated Area Sown for Harvest of 1913.	Condition Compared With Average.	Area, 1911.	Area, 1912.	Average Tons per Acre.	Total Estimated Product for 1912.	Yield Compared With 1911.	Prospect Compared With Average.	Prospect Compared With Average.	Prospect Compared With Average.	Prospect Compared With Average.	Prospect Compared With Average.
	Acres.	Per Cent.	Acres.	Per Cent.	Acres.	Acres.	Tons.	Tons.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Adams	1,822	104	1,895	107	.....	.....	.....	.....	.....	116	.....	95	.....	69
Brown	4,463	150	6,695	99	.....	.....	.....	.....	.....	89	.....	.....	.....	85
Butler	940	98	921	101	.....	.....	.....	.....	.....	89	.....	.....	.....	70
Clark	2,574	101	2,600	92	.....	.....	.....	.....	.....	105	.....	.....	.....	55
Clermont	2,008	108	2,189	102	.....	.....	.....	.....	.....	82	.....	100	.....	55
Clinton	2,815	100	2,815	97	.....	.....	.....	.....	.....	98	.....	.....	.....	54
Payette	1,125	89	1,001	97	.....	.....	.....	.....	.....	98	.....	.....	.....	60
Franklin	814	88	1,716	94	.....	.....	.....	.....	.....	103	.....	100	.....	50
Greene	2,436	104	2,533	92	.....	.....	.....	.....	.....	99	.....	.....	.....	45
Hamilton	2,446	170	2,763	102	.....	.....	.....	.....	.....	86	.....	.....	.....	60
Highland	2,446	104	2,303	86	.....	.....	.....	.....	.....	106	.....	120	.....	55
Madison	332	103	1,007	96	.....	.....	.....	.....	.....	98	.....	.....	.....	35
Miami	1,473	123	1,860	97	.....	.....	.....	.....	.....	96	.....	.....	.....	61
Montgomery	1,473	110	1,520	97	.....	.....	.....	.....	.....	107	.....	.....	.....	29
Pickaway	482	104	501	83	.....	.....	.....	.....	.....	96	.....	.....	.....	63
Pike	228	102	233	82	.....	.....	.....	.....	.....	120	.....	98	.....	100
Preble	1,562	130	2,031	104	.....	.....	.....	.....	.....	106	.....	.....	.....	57
Ross	2,007	90	1,806	101	.....	.....	.....	.....	.....	99	.....	94	.....	69
Scioto	218	101	216	101	.....	.....	.....	.....	.....	108	.....	.....	.....	75
Warren	1,826	119	2,173	116	.....	.....	.....	.....	.....	106	.....	100	.....	115
Averages	.....	111	.....	98	.....	.....	.....	.....	.....	100	.....	99	.....	65
Totals	31,488	.....	35,048	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	4,463	.....	6,695	116	.....	.....	.....	.....	.....	120	.....	120	.....	115
Minimum	218	.....	216	83	.....	.....	.....	.....	.....	82	.....	90	.....	29
STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.														
Averages	.....	110	.....	98	.....	.....	11	.....	92	100	.....	96	.....	70
Totals	89,533	.....	97,644	.....	6,443	7,458	.....	81,343	.....	120	.....	120	.....	115
Maximum	4,463	.....	6,695	130	1,874	1,675	15	20,100	115	120	.....	120	.....	115
Minimum	74	.....	49	83	6	5	5	75	75	71	.....	80	.....	29

SOUTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE AREA OF WHEAT, RYE AND SUGAR BEETS, AREA AND PRODUCTION OF ALFALFA, SUGAR BEETS AND POTATOES AND THE CONDITION OF OTHER CROPS, NOVEMBER 1, 1912.

Counties.	Potatoes.				Hogs.		Wheat.	Corn.	Barley.	Oats.	Rye.	Potatoes.	Hay.	Alfalfa.	Sugar Beets.
	Area Planted as Township Assessors.	Average Product per Acre.	Total Estimated Product for 1912.	Affected by Rot.	Condition Compared With an Average.	Number Fattened Compared With 1911.									
							Per Cent.	Per Cent.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Ton.	Price per Ton.	
	Acres.	Bushels.	Bushels.	Per Cent.	Per Cent.	Price per Bushel.	Price per Bushel.	Price per Bushel.							Price per Bushel.
Adams	152	83	12,616	8	97	79	\$0 97	\$0 56	\$1 00	\$0 39	\$0 82	\$0 72	\$12 50	\$11 00	.....
Brown	216	88	19,008	4	97	83	1 02	64	.....	38	83	69	13 00	15 00	.....
Butler	1,033	82	84,706	12	82	68	1 01	98	86	35	94	69	15 43	16 75	.....
Clark	721	125	90,125	16	88	77	98	59	75	31	74	61	11 71	16 00	.....
Clermont	863	91	78,533	5	93	85	99	65	70	39	83	75	15 57	16 00	.....
Clinton	65	96	6,240	1	79	71	96	50	.....	31	83	56	12 18	15 25	.....
Fayette	10	110	1,100	2	73	71	96	48	.....	31	70	63	12 00	18 00	.....
Franklin	1,457	99	144,243	3	93	83	1 02	51	80	32	79	84	12 50	12 31	.....
Greene	599	95	56,905	4	86	69	96	49	65	31	66	52	11 12	14 00	.....
Hamilton	3,987	89	354,843	5	100	94	1 04	68	76	37	79	78	19 00	15 40	.....
Highland	34	102	3,468	.....	93	84	96	56	.....	31	82	61	12 45	16 75	.....
Madison	104	123	12,792	.....	93	81	98	55	.....	31	69	45	11 00	15 00	.....
Miami	1,105	109	120,445	1	96	86	98	56	65	34	66	60	14 80	14 85	.....
Montgomery	580	99	57,420	11	95	85	99	50	.....	30	92	73	11 45	13 50	.....
Pickaway	92	146	13,432	2	83	69	95	49	.....	32	82	49	11 67	15 00	.....
Pike	419	119	49,861	5	96	87	97	46	.....	30	70	49	14 67	15 00	.....
Preble	269	111	29,859	3	97	89	1 02	56	60	33	89	55	11 60	13 17	.....
Ross	594	126	74,844	2	89	74	95	58	.....	33	90	52	13 08	13 20	.....
Schooto	1,158	122	141,398	2	96	92	1 00	58	75	38	90	55	13 08	13 20	.....
Warren	302	126	38,052	3	85	78	99	51	.....	34	81	65	14 33	14 40	.....
Averages	109	.....	1,390,090	4	91	80	\$0 99	\$0 55	\$0 75	\$0 34	\$0 80	\$0 62	\$13 16	\$14 77	.....
Totals	13,761	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	3,987	146	354,843	12	100	94	\$1 04	\$0 68	\$1 00	\$0 39	\$0 94	\$0 78	\$19 00	\$18 00	.....
Minimum	10	82	1,100	.....	73	68	95	46	60	30	66	45	11 00	11 00	.....

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.															
Averages	112	.....	.....	5	94	84	\$1 01	\$0 59	\$0 68	\$0 35	\$0 80	\$0 52	\$13 46	\$16 20	\$4 96
Totals	103,262	.....	11,604,902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	5,783	170	601,432	18	104	104	\$1 09	\$0 78	\$1 00	\$0 43	\$1 00	\$0 78	\$20 00	\$25 00	\$5 50
Minimum	10	79	1,100	.....	73	68	93	46	40	29	60	30	10 80	10 00	4 00

Official Report

OF THE

Ohio Department of Agriculture

December 1, 1912

The following report is computed from returns received from the official correspondents of the Department:

WHEAT—Condition compared with an average-----	92 per cent.
“ —Amount of crop of 1912 sold as soon as threshed---	48 per cent.
“ —Damage to growing crop by Hessian fly-----	4 per cent.
“ —Damage to growing crop by white grub worm----	1 per cent.
CORN—Area planted in 1912 as returned by township assessors	3,213,667 acres
“ —Estimated average yield per acre of shell corn-----	40 bushels
“ —Total estimated product for 1912-----	127,868,844 bushels
“ —Crop of 1912 put into silo-----	9 per cent.
“ —Average date cribbing began-----	October 22
CLOVER—Area sown in 1911 cut for seed-----	22 per cent.
“ —Average yield of seed per acre-----	1.33 bushels
APPLES—Probable total yield compared with last year-----	66 per cent.
TOBACCO—Probable average product per acre-----	789 pounds
CATTLE—Number being fed for Spring market compared with an average-----	68 per cent.
SHEEP—Number fed for mutton compared with an average--	73 per cent.

STATE AVERAGE PRICES.

Per Bushel—WHEAT -----	\$0 99
—CORN -----	49
—BARLEY -----	65
—OATS -----	34
—RYE -----	77
—POTATOES -----	54
Per Ton—HAY -----	12 91
—ALFALFA -----	14 81

The growing condition of the wheat plant over the State is quite satisfactory. A greater part of the wheat area was sown late, and while now the plant is small, it is thought to be well rooted and in good condition to go into winter. During the month of November wheat growth was retarded, owing to the exceeding dry weather. Reports of damage by fly to early-seeded wheat are very general. The State average is estimated at 4 per cent. Approximately one-half of the harvest was sold as

soon as threshed. The present condition of the growing plant is estimated at 92 per cent., compared with an average. This is a decline of 6 per cent. since the issuance of the November report. One year ago wheat condition was estimated at 83 per cent.

The late open fall was most favorable to the corn crop and a bountiful harvest has resulted. The estimated 1912 corn area as returned by township assessors was 3,213,667 acres. From this the harvest has produced 127,868,844 bushels, an average of 40 bushels per acre. This is the largest production Ohio has harvested since 1900. In that year 3,361,166 acres yielded 143,161,675 bushels. The crop generally is of excellent quality and was cribbed in fine condition. The average market price is estimated at 49 cents per bushel.

Reports from correspondents show that the apple crop of the present year was but 66 per cent. of the crop of 1911, which was the largest crop harvested in the last decade. The general supposition was that this year's crop was fully as large as that of last year, and with respect to commercial orchards this is true. The difference is due almost entirely to the full crop of the general farm orchard throughout the State in 1911, and shows the important part these orchards play when total production is considered. This year there was no crop in these orchards in many sections of the State, with the result that the total production is but little more than two-thirds of last year's crop.

The average production per acre of tobacco is estimated at 789 pounds. Last year the estimated yield per acre was 887 pounds.

The number of sheep and cattle being fed for market is far below an average, although the estimated number now reported is greater than one year ago.

NORTHEAST SECTION.
OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Wheat.				Corn.				Clover.					
	Number Reports Received.	Condition Compared With an Average.	Amount of Crop as Soon as Threshed.	Damage to Growing Crop by Hessian Fly.	Damage to Growing Crop by White Grub.	Area Planted in 1912 as Returned by Township Assessors.	Estimated Average Yield per Acre of Shelled Corn.	Bushels.	Total Estimated Product for 1912.	Per Cent. of Crop of 1912 Put Into Silo.	Days.	Date Cribbing Began After Oct. 1.	Per Cent. of Area Sown in 1911 Cut for Seed.	Average Yield of Seed per Acre.
Number.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Acres.	Bushels.	Per Cent.	Bushels.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Bushels.
Ashtland	10	89	44	6	3	23,990	32	767,680	9	16	21	1.31		
Ashtabula	18	97	28	1	2	17,163	32	549,216	39	24	12	1.91		
Carroll	8	98	20	1	2	13,315	35	466,025	17	19	24	1.07		
Columbiana	14	99	18	2	2	18,463	36	592,668	13	24	6	.98		
Coshocton	18	89	39	2	4	23,526	43	1,011,618	13	23	23	1.30		
Cuyahoga	12	96	51	2	3	17,454	37	633,908	18	33	4	1.75		
Erie	9	96	49	4	2	8,718	36	627,244	11	22	22	1.00		
Geauga	11	98	39	1	5	10,606	38	287,694	57	21	26	2.00		
Harrison	12	96	16	3	1	21,543	38	403,028	6	26	8	1.58		
Holmes	8	103	34	4	4	32,142	41	883,263	5	25	52	1.47		
Huron	11	92	57	1	1	11,027	45	496,115	11	15	33	1.20		
Jefferson	14	90	15	2	5	34,188	39	1,308,828	11	15	13	1.13		
Knox	20	95	42	2	1	21,030	35	246,150	15	33	8	1.33		
Lake	5	100	52	4	1	17,050	35	427,750	33	26	6	1.40		
Lorain	12	97	43	3	3	21,385	34	727,090	33	26	13	1.40		
Madison	10	87	39	3	3	12,237	34	416,058	38	27	13	1.18		
Medina	11	92	46	3	4	20,107	34	683,638	30	27	19	.91		
Portage	13	92	34	1	1	16,285	31	504,215	36	27	23	1.00		
Richland	12	95	44	2	2	29,228	35	1,064,245	10	22	20	1.21		
Stark	16	95	32	2	3	15,109	31	906,068	19	23	26	1.00		
Summit	16	98	37	2	3	16,155	30	377,725	34	23	38	1.40		
Trumbull	20	90	37	6	3	19,573	30	484,650	10	23	47	.87		
Tuscarawas	15	96	25	1	3	41,514	36	763,347	8	19	47	.87		
Wayne	16	99	53	1	3	41,514	36	1,494,504	8	19	47	.87		
Averages	.....	95	36	3	2	465,535	36	16,834,207	17	Oct. 25	20	1.37	
Totals	311
Maximum	20	103	79	6	5	41,514	47	1,509,828	57	27	52	4.00		
Minimum	5	87	15	1	1	6,438	25	238,206	4	15	4	.87		

NORTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Apples.		Tobacco.		Cattle.		Sheep.		Wheat.		Corn.		Barley.		Oats.		Rye.		Potatoes.		Hay.		Alfalfa.	
	Probable Total Yield Compared With Last Year.		Probable Acreage Product.		No. Being Fed for Spleting Compared With Market Average.		No. Being Fed Compared With an Average.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Ton.		Price per Ton.	
	Per Cent.	Pounds.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.																
Ashtland	121	.....	.....	75	76	.....	.....	\$0 47	\$0 72	\$0 32	\$0 69	\$0 43	\$12 80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashtabula	142	.....	.....	76	76	.....	.....	1 01	.....	40	83	46	13 30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carroll	63	.....	.....	66	75	.....	.....	1 01	.....	37	83	51	13 34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbiana	94	.....	.....	72	69	.....	.....	1 02	.....	40	81	58	14 59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coshocton	71	.....	.....	54	71	.....	.....	1 02	.....	35	83	55	11 74	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuyahoga	83	.....	.....	32	86	.....	.....	1 02	.....	38	72	68	13 03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Erie	113	.....	.....	76	73	.....	.....	1 01	.....	31	73	49	14 84	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Geauga	79	.....	.....	31	54	.....	.....	1 01	.....	37	85	53	14 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrison	67	.....	.....	80	69	.....	.....	1 00	.....	34	73	44	11 88	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Holmes	74	.....	.....	67	82	.....	.....	1 00	.....	29	66	43	13 32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huron	80	.....	.....	46	65	.....	.....	1 00	.....	46	88	61	15 31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson	69	.....	.....	61	71	.....	.....	1 02	.....	35	79	48	12 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Knox	95	.....	.....	93	100	.....	.....	1 02	.....	41	76	52	13 73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lorain	92	.....	.....	72	86	.....	.....	1 04	.....	34	86	58	15 33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mahoning	96	.....	.....	42	83	.....	.....	1 01	.....	37	86	58	15 80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Medina	74	.....	1,000	69	83	.....	.....	1 02	.....	31	97	47	13 73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Portage	117	.....	.....	69	83	.....	.....	1 04	.....	35	80	50	14 58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richland	47	.....	.....	61	78	.....	.....	1 00	.....	30	69	43	12 87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stark	61	.....	.....	61	70	.....	.....	1 01	.....	35	87	54	13 86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Summit	60	.....	.....	75	67	.....	.....	1 02	.....	36	84	64	16 57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trumbull	60	.....	.....	77	67	.....	.....	1 03	.....	37	88	55	14 79	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuscarawas	44	.....	.....	69	67	.....	.....	1 03	.....	36	73	54	12 87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wayne	80	.....	.....	61	69	.....	.....	1 00	.....	32	83	46	12 57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Averages	82	1,000	.....	69	75	.....	.....	\$0 56	\$0 69	\$0 36	\$0 83	\$0 52	\$14 01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	142	1,000	.....	93	100	.....	.....	65	85	46	1 03	68	18 08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Minimum	44	.....	.....	31	54	.....	.....	47	50	29	1 06	43	11 47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

SOUTHEAST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Apples.		Tobacco.		Cattle.		Sheep.		Wheat.		Corn.		Barley.		Oats.		Rye.		Potatoes.		Hay.		Alfalfa.	
	Probable Total Yield Compared With Last Year.	Per Cent.	Probable Average Product per Acre.	Pounds.	No. Being Fed for Spring Market Compared With Average.	Per Cent.	No. Being Fed for Mutton Compared With an Average.	Per Cent.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Ton.	Price per Ton.	Price per Ton.	Price per Ton.
Athens	123				68		79		\$1 00		\$0 55				\$0 39		\$0 88		\$0 60		\$12 00		\$14 00	
Belmont	110		1,023		70		72				55		\$0 75		39		88		61		13 00		15 00	
Fairfield	27				78		59		99		42				34		71		58		12 00		15 00	
Gallia	138		800		41		39		1 02		51				37		87		80		12 00		13 00	
Guernsey	76		865		49		65		96		54		1 10		39		88		62		13 00		18 00	
Hocking	33				70		79		99		50				40		98		63		12 00		11 00	
Jackson	60				32		75		1 00		97				43		88		73		13 00			
Lawrence	133		800		55		62		98		53		60		36		91		66		15 00		20 00	
Licking	47				55		67		1 00		55		75		39		89		55		13 00		17 00	
Meigs	157		1,000		61		67		97		48				35		81		61		12 00		12 00	
Monroe	87		1,056		67		67		1 00		53		70		43		87		51		13 00		12 00	
Morgan	98		500		63		70		1 00		54				38		92		58		13 00		13 00	
Muskingum	77				68		97		99		49				39		89		65		13 00		18 00	
Noble	78		958		56		65		1 00		55		50		39		90		55		13 00		14 00	
Perry	74				70		72		95		57				40		82		51		13 00		11 00	
Vinton	63				55		70		97		54				38		97		54		10 00			
Washington	85		1,000		63		62		99		53		1 00		40		91		57		13 00		13 00	
Averages	86		889		61		69		\$0 99		\$0 55		\$0 77		\$0 39		\$0 88		\$0 61		\$12 65		\$14 40	
Totals																								
Maximum	167		1,056		78		97		1 02		97		1 10		43		98		80		15 00		20 00	
Minimum	27		500		32		39		95		42		50		34		71		51		10 00		11 00	

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	66	789	68	73	\$0 99	\$0 49	\$0 65	\$0 34	\$0 77	\$0 54	\$12 91	\$14 81
Totals												
Maximum	157	1,100	100	100	1 04	97	1 10	46	1 03	80	18 08	23 00
Minimum	4	350	31	39	92	35	30	27	60	32	10 00	10 67

NORTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Number Reports Received.	Wheat.				Corn.					Clover.	
		Condition Compared With an Average.	Amount of Crop of 1912 Sold as Soon as Threshed.	Damage to Growing Crop by Hessian Fly.	Damage to Growing Crop by White Grub.	Area Planted in 1912 as Returned by Township Assessors.	Estimated Average Yield per Acre of Shelled Corn.	Total Estimated Product for 1912.	Per Cent. of Crop Put Into Silo.	Date Cribbing Began Days After Oct. 1.	Per Cent. of Area Sown in 1911 Cut for Seed.	Average Yield of Seed per Acre.
		Per Cent.	Per Cent.	Per Cent.	Per Cent.	Acres.	Bushels.	Bushels.	Per Cent.	Days.	Per Cent.	Bushels.
Allen	10	98	59	.....	.....	38,376	39	1,496,664	3	12	20	85
Auglaize	11	93	70	.....	.....	51,420	44	2,982,480	4	4	21	1.06
Champaign	13	92	71	.....	.....	55,761	42	2,468,214	3	17	23	1.23
Crawford	18	93	39	.....	.....	37,606	36	1,353,515	2	20	31	1.00
Darke	12	94	52	.....	.....	93,149	43	4,065,407	2	16	31	1.02
Delaware	10	94	75	.....	.....	34,542	47	1,623,474	3	19	46	1.90
Delaware	17	94	64	.....	.....	41,818	37	1,547,155	11	18	6	1.65
Fulton	6	99	50	.....	.....	39,405	45	1,773,225	4	4	23	1.00
Hancock	13	93	34	.....	.....	57,972	45	2,608,740	4	10	20	1.00
Hardin	9	84	74	.....	.....	36,449	41	1,576,409	4	14	27	1.22
Henry	10	98	18	.....	.....	65,850	58	3,819,300	7	7	33	1.22
Logan	13	96	62	.....	.....	46,238	46	2,126,948	6	21	26	1.23
Lucas	6	106	54	.....	.....	29,994	57	1,709,658	7	31	36	1.85
Marion	13	94	46	.....	.....	51,754	40	2,070,160	6	25	12	1.84
Mercer	12	91	48	.....	.....	51,737	41	2,121,217	4	15	23	1.93
Morrow	15	99	40	.....	.....	26,906	37	985,522	7	18	32	1.93
Ottawa	6	80	31	.....	.....	25,097	42	1,054,074	4	26	30	1.00
Paulding	13	95	82	.....	.....	63,178	46	2,906,188	3	19	41	1.33
Putnam	19	89	81	.....	.....	59,322	45	2,669,490	3	18	41	1.33
Sanuck	10	93	70	.....	.....	53,155	44	2,338,820	12	19	17	1.13
Seneca	11	91	49	.....	.....	54,111	39	2,110,329	20	20	33	1.73
Shelby	12	82	47	.....	.....	51,696	41	2,115,436	20	17	19	1.00
Union	13	93	54	.....	.....	52,072	39	2,030,808	7	18	16	1.06
Van Wert	6	93	50	.....	.....	55,438	42	2,128,396	5	20	22	1.79
Williams	12	96	43	.....	.....	33,221	38	1,262,398	5	20	35	1.08
Wood	12	96	53	.....	.....	96,785	43	4,161,755	3	13	43	1.95
Wyandot	12	93	63	.....	.....	41,164	43	1,770,052	7	16	31	1.25
Averages	.....	93	56	.....	.....	1,349,119	43	58,066,135	6	Oct 18	28	1.15
Totals	304	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	18	106	82	5	3	96,785	58	4,161,755	20	31	46	1.95
Minimum	6	80	18	1	1	25,097	36	985,522	2	10	6	1.73

NORTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Apples.		Tobacco.		Cattle.		Sheep.		Wheat.		Corn.		Barley.		Oats.		Rye.		Potatoes.		Hay.		Alfalfa.	
	Probable Total Yield Compared With Last Year.		Probable Average Product per Acre.		No. Being Fed for Spring Market Compared With Average.		No. Being Fed for Market Compared With Average.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Bushel.		Price per Ton.		Price per Ton.	
	Per Cent.	Pounds.	Per Cent.	Pounds.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢
Allen	58	.....	.....	.....	69	77	77	77	\$0 98	98	\$0 46	46	\$0 61	61	\$0 29	29	\$0 64	64	\$0 45	45	\$11 60	60	\$13 40	40
Auglaize	41	.....	.....	.....	72	63	63	63	98	42	42	42	58	58	30	30	68	68	51	51	12 00	00	12 00	00
Champaign	7	.....	400	.....	52	40	40	40	94	40	40	40	59	59	29	29	89	89	43	43	10 75	75	12 61	61
Crawford	142	.....	.....	.....	78	87	87	87	1 00	00	51	51	59	59	29	29	69	69	43	43	18 09	09	.....	.....
Darke	7	.....	768	.....	59	64	64	64	94	41	41	41	40	40	30	30	65	65	42	42	18 86	86	15 14	14
Defiance	63	.....	350	.....	73	71	71	71	1 00	00	42	42	51	51	29	29	61	61	41	41	13 39	39	13 50	50
Delaware	28	.....	.....	.....	58	74	74	74	1 00	00	50	50	59	59	32	32	83	83	55	55	11 80	80	15 00	00
Fulton	117	.....	.....	.....	95	98	98	98	99	00	42	42	59	59	30	30	72	72	32	32	13 25	25	16 50	50
Hancock	82	.....	.....	.....	71	76	76	76	1 01	01	41	41	43	43	29	29	63	63	42	42	11 66	66	11 75	75
Hardin	51	.....	.....	.....	63	93	93	93	1 00	00	45	45	57	57	29	29	63	63	42	42	10 38	38	11 75	75
Henry	36	.....	.....	.....	76	76	76	76	1 01	01	46	46	65	65	30	30	67	67	39	39	12 50	50	17 00	00
Logan	10	.....	.....	.....	76	70	70	70	97	00	41	41	61	61	30	30	66	66	51	51	10 77	77	13 20	20
Lucas	99	.....	.....	.....	88	100	100	100	99	99	47	47	58	58	31	31	68	68	43	43	16 33	33	18 00	00
Marion	65	.....	.....	.....	71	83	83	83	96	66	42	42	53	53	29	29	62	62	51	51	11 54	54	12 00	00
Mercer	41	.....	.....	.....	74	78	78	78	96	66	41	41	57	57	27	27	62	62	44	44	11 59	59	14 00	00
Morrow	86	.....	.....	.....	63	70	70	70	1 01	01	46	46	61	61	30	30	72	72	49	49	11 14	14	12 50	50
Ottawa	88	.....	.....	.....	74	74	74	74	97	00	41	41	56	56	31	31	65	65	45	45	14 25	25	14 00	00
Paulding	89	.....	.....	.....	96	96	96	96	97	00	35	35	56	56	29	29	61	61	48	48	12 63	63	11 50	50
Putnam	83	.....	.....	.....	66	75	75	75	96	66	40	40	53	53	29	29	64	64	39	39	11 67	67	10 67	67
Sandusky	71	.....	.....	.....	64	58	58	58	1 02	02	40	40	60	60	30	30	74	74	44	44	13 38	38	15 00	00
Seneca	92	.....	.....	.....	72	85	85	85	1 00	00	41	41	51	51	30	30	66	66	43	43	13 00	00	13 80	80
Shelby	10	.....	800	.....	68	80	80	80	96	66	40	40	75	75	28	28	63	63	49	49	12 92	92	14 20	20
Union	22	.....	.....	.....	55	65	65	65	99	00	41	41	68	68	31	31	67	67	58	58	11 37	37	12 58	58
Van Wert	73	.....	.....	.....	81	83	83	83	97	00	37	37	68	68	28	28	60	60	43	43	11 42	42	13 00	00
Williams	99	.....	.....	.....	78	87	87	87	1 00	00	46	46	59	59	29	29	64	64	35	35	12 00	00	13 00	00
Wood	87	.....	.....	.....	64	77	77	77	1 01	01	43	43	50	50	30	30	71	71	49	49	13 91	91	17 20	20
Wyandot	85	.....	.....	.....	65	72	72	72	98	00	42	42	65	65	30	30	73	73	45	45	11 90	90	.....	.....
Averages	66	.....	580	.....	71	77	77	77	\$0 99	99	\$0 43	43	\$0 56	56	\$0 29	29	\$0 66	66	\$0 45	45	\$12 37	37	\$13 88	88
Totals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	142	.....	800	.....	98	100	100	100	1 02	02	51	51	75	75	32	32	83	83	58	58	16 38	38	18 00	00
Minimum	7	.....	350	.....	52	40	40	40	94	00	35	35	30	30	27	27	60	60	32	32	10 38	38	10 67	67

SOUTHWEST SECTION.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Wheat.				Corn.				Clover.			
	Number Reports Received.	Condition Compared With an Average.	Amount of Crop Sold as Threshed.	Damage to Growing Crop by Hessian Fly.	Damage to Growing Crop by White Grub.	Area Planted in 1912 as Returned by Township Assessors.	Estimated Average Yield per Acre of Shelled Corn.	Total Estimated Product for 1912.	Per Cent. of Crop Put into Silo.	Date Cribbing Began After Oct. 1.	Per Cent. of Area Sown in 1911 Cut for Seed.	Average Yield of Seed per Acre.
Number.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Acres.	Bushels.	Bushels.	Per Cent.	Days.	Per Cent.	Bushels.
Adams	12	93	55	10	3	36,845	33	1,215,885	6	25	29	1.17
Brown	15	94	51	4	.....	45,024	32	1,440,768	7	30	10	1.62
Butler	10	95	43	3	.....	58,735	39	2,290,685	4	23	23	1.17
Clark	9	93	74	2	.....	59,053	38	2,244,014	7	20	19	1.41
Clermont	12	99	44	6	.....	39,457	29	1,144,253	11	32	17	1.56
Clinton	14	97	70	3	.....	65,752	41	2,695,832	10	26	10	1.36
Fayette	5	84	77	3	.....	54,690	34	1,859,460	9	23	8	1.45
Franklin	19	92	47	3	.....	60,960	45	2,743,200	7	17	20	1.32
Greene	7	84	59	.....	.....	62,152	40	2,486,080	7	26	8	1.96
Hamilton	9	101	43	.....	.....	20,393	38	774,934	5	30	28	1.00
Highland	15	90	51	8	.....	58,934	36	2,121,624	13	27	25	1.36
Madison	11	88	83	.....	.....	76,426	38	2,904,188	1	27	14	1.04
Miami	9	100	60	.....	.....	58,425	42	2,453,830	4	21	28	1.11
Montgomery	12	93	64	.....	.....	49,903	40	1,996,120	5	21	28	1.27
Pickaway	11	88	66	5	.....	80,354	40	3,214,160	4	23	28	1.27
Pike	8	81	53	6	.....	24,574	33	811,074	4	24	24	1.31
Preble	9	102	76	1	.....	69,797	40	2,791,880	5	23	20	1.29
Ross	11	91	50	3	.....	69,540	37	2,572,980	5	23	24	1.17
Scioto	15	86	58	.....	.....	23,647	38	898,586	20	22	24	1.25
Warren	9	101	69	2	.....	50,997	36	1,835,892	13	22	24	1.92
Averages	.....	93	60	4	1	1,065,662	38	40,495,445	7	Oct. 25	19	1.28
Totals	222	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	19	102	83	10	3	80,354	45	3,214,160	20	32	29	1.92
Minimum	5	81	43	1	1	20,393	32	774,934	1	17	7	.83

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	.....	92	48	4	1	3,213,667	40	137,868,844	9	Oct. 22	22	1.33
Totals	1,055	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	20	106	83	17	7	96,785	58	4,161,755	57	32	52	4.00
Minimum	5	61	9	1	1	6,438	23	238,206	1	10	4	.73

SOUTHWEST SECTION—Concluded.

OFFICIAL REPORT OF THE OHIO DEPARTMENT OF AGRICULTURE ON THE ACREAGE AND PRODUCTION OF CORN AND THE CONDITION OF OTHER CROPS DECEMBER 1, 1912.

Counties.	Apples.		Tobacco.		Cattle.		Sheep.		Wheat.		Corn.		Barley.		Oats.		Rye.		Potatoes.		Hay.		Alfalfa.	
	Probable Total Yield With Last Year.	Probable Average Product per Acre.	No. Being Fed for Spring Market Compared With Average.		No. Being Fed Compared With an Average.		Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Bushel.	Price per Ton.	Price per Ton.	Price per Ton.	Price per Ton.	
			Per Cent.	Pounds.	Per Cent.	Per Cent.																		
Adams	77	850	54	71	\$0 97	\$0 50	\$0 82	\$0 37	\$0 77	\$0 68	\$12 17	\$11 60												
Brown	45	883	64	64	1 00	53	82	40	81	72	12 93	16 50												
Butler	16	700	58	57	1 00	42	82	33	85	66	14 90	16 00												
Clark	20	1,100	52	83	96	44	85	30	73	56	11 72	14 17												
Clermont	18	863	67	67	1 00	52	75	40	83	64	14 00	14 40												
Clinton	27	800	66	73	93	42	80	32	79	58	11 31	15 20												
Fayette	9	.....	82	75	95	40	.....	30	80	71	11 31	15 20										
Franklin	6	.....	61	76	98	44	.....	33	75	63	11 29	13 00										
Greene	4	700	79	79	97	41	55	31	68	54	10 43	13 75												
Hamilton	61	700	100	95	1 02	50	73	36	68	73	17 00	15 22												
Highland	21	725	63	53	97	50	.....	38	82	59	12 30	18 00											
Madison	11	.....	65	73	96	40	.....	30	84	63	11 32	15 00										
Miami	10	766	70	67	1 00	45	73	34	85	57	14 73	15 13												
Montgomery	18	838	60	52	96	41	.....	30	85	69	10 64	13 50											
Pickaway	4	.....	58	83	94	40	.....	30	80	57	12 53	15 00										
Pike	57	600	70	68	95	42	50	33	80	57	12 53	15 00												
Preble	4	818	73	58	98	42	45	30	86	52	12 61	12 83												
Ross	15	.....	75	80	92	40	.....	33	84	55	11 64	12 89										
Scioto	116	632	87	72	1 00	47	.....	39	92	60	13 33	13 25											
Warren	21	600	83	76	98	43	.....	32	72	51	12 75	13 86											
Averages	28	771	70	71	\$0 97	\$0 44	\$0 70	\$0 33	\$0 76	\$0 61	\$12 60	\$14 28												
Totals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	116	1,100	100	95	1 02	53	85	40	92	73	17 00	18 00												
Minimum	4	600	52	52	92	40	45	30	64	51	10 43	12 33												

STATE AVERAGES, TOTALS, MAXIMUM AND MINIMUM.

Averages	66	789	68	73	\$0 99	\$0 49	\$0 65	\$0 34	\$0 77	\$0 54	\$12 91	\$14 81
Totals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maximum	157	1,100	100	100	1 04	97	1 10	46	1 03	80	18 08	23 00
Minimum	4	350	31	39	92	35	30	27	60	32	10 00	10 67

TABULAR STATEMENT.

Exhibiting the Number of Horses, Cattle, Mules, etc., Sheep and Hogs Returned to the Auditor of State's Office by the Several County Auditors, for the years 1911 and 1912, as Required by Section 2604, General Code, and to Provide for the Publication of the Same, as Provided by Section 261, General Code.

Counties.	Number of Horses.		Number of Cattle.		Number of Mules.		Number of Sheep.		Number of Hogs.	
	1911.	1912.	1911.	1912.	1911.	1912.	1911.	1912.	1911.	1912.
Adams	5,911	6,228	10,210	9,447	426	451	8,266	7,829	9,094	8,177
Allen	10,165	10,636	14,780	13,550	167	170	22,847	19,990	27,142	26,785
Ashtabula	18,166	18,302	13,158	13,534	184	182	40,137	35,043	14,065	14,043
Athens	12,150	12,190	29,752	30,964	120	177	11,084	9,427	6,368	6,385
Auglaize	10,212	10,386	17,014	15,486	260	295	45,377	40,320	3,809	2,860
Belmont	8,573	8,684	17,535	15,486	295	273	10,340	8,903	28,962	28,769
Brown	7,979	8,241	18,234	17,535	690	244	68,441	56,057	8,616	7,726
Butler	11,387	10,957	12,883	13,128	513	516	10,432	9,483	20,765	20,710
Carroll	5,065	5,728	16,191	15,743	753	799	10,072	9,025	28,705	26,976
Champaign	11,879	11,756	10,892	11,681	86	91	58,534	52,099	6,964	7,347
Clark	12,658	12,562	18,425	15,224	538	559	30,053	26,744	36,704	37,922
Clermont	7,833	8,254	18,720	18,012	676	610	27,830	24,961	30,884	27,019
Clinton	10,628	10,802	14,136	15,174	719	781	4,257	4,336	14,157	14,280
Columbiana	10,632	10,812	14,566	14,041	711	682	23,571	24,252	48,285	38,461
Coshocton	7,135	6,821	14,321	12,957	201	149	93,554	81,632	9,586	9,792
Crawford	9,479	9,364	15,764	13,931	287	274	54,868	46,404	26,351	27,342
Cuyahoga	22,629	16,315	13,608	13,006	424	194	4,719	3,469	2,463	2,102
Darke	19,051	19,471	24,917	24,489	476	462	7,024	6,747	38,467	40,590
Defiance	7,062	8,333	11,230	10,958	106	120	16,938	13,508	13,161	15,487
Delaware	10,089	10,173	19,428	17,322	183	182	57,480	51,368	21,552	21,388
Erle	6,261	6,305	7,488	7,279	29	49	12,746	11,275	6,308	7,508
Fairfield	11,965	11,713	22,026	19,674	226	218	17,942	15,986	38,159	35,052
Fayette	11,197	11,619	15,401	13,203	459	408	27,630	21,775	46,965	31,485
Franklin	18,228	16,286	21,604	20,928	565	392	13,812	10,303	22,952	23,516
Fulton	8,625	8,568	15,452	16,302	68	73	13,556	11,019	16,597	17,619
Gallia	5,431	5,504	10,756	10,407	288	291	18,272	17,226	4,585	4,462
Geauga	5,752	6,204	20,428	21,012	81	72	5,571	4,790	3,748	4,112
Greene	10,967	10,024	20,188	21,012	613	601	23,181	21,488	39,497	35,513
Guernsey	8,648	7,356	13,854	12,969	422	163	82,060	70,533	8,657	5,450
Hamilton	18,593	14,902	15,753	15,156	492	1,608	9,999	9,753	8,577	10,080
Hancock	11,592	11,890	21,363	19,370	1,856	1,608	34,900	34,900	38,553	45,819
Hardin	11,487	11,566	17,402	15,545	314	324	41,097	47,252	34,072	36,743
Harrison	6,195	5,395	9,996	9,580	122	112	116,995	104,239	5,100	13,106
Henry	9,081	9,093	12,650	12,928	135	177	28,566	25,548	13,946	15,006
Highland	9,836	10,386	19,057	17,799	617	611	28,566	25,548	38,589	36,781
Hocking	4,298	4,389	9,078	8,546	127	110	16,015	13,993	4,873	5,255
Holmes	7,603	7,439	14,800	13,734	98	107	28,028	24,196	14,440	15,208
Huron	9,231	9,802	13,204	12,863	160	170	58,744	57,683	12,060	13,752

	850,557	825,813	1,372,689	1,286,276	28,637	26,637	2,702,804	2,365,448	1,555,354	1,569,563
Jackson	3,835	3,818	11,167	9,883	543	251	3,763	3,784	3,429	3,743
Jefferson	8,897	8,919	10,576	9,897	188	169	49,544	48,737	5,566	5,017
Knox	7,428	7,428	12,316	12,316	254	213	123,849	102,157	18,744	16,618
Lake	4,850	4,850	7,401	7,443	37	49	4,085	3,425	2,096	2,324
Lawrence	4,813	4,813	8,146	8,056	551	446	1,904	1,793	4,471	3,621
Licking	13,512	13,512	27,670	23,733	298	321	123,167	107,123	25,965	24,092
Loran	11,559	11,559	18,350	17,326	311	286	48,293	41,463	26,820	24,585
Logan	10,909	10,909	20,200	20,537	46	67	18,155	15,014	7,093	6,698
Lucas	5,485	5,485	9,798	8,377	63	.....	1,994	1,449	8,806	9,945
Madison	12,851	12,851	18,030	18,030	386	465	40,042	26,883	37,739	35,936
Maoning	9,827	9,827	16,033	16,179	331	280	19,780	19,815	7,380	7,244
Marion	8,726	8,726	13,101	13,101	314	274	52,498	45,744	32,785	34,444
Medina	9,415	9,415	16,870	15,456	178	149	20,973	16,316	8,613	7,933
Meigs	5,478	5,270	11,180	10,251	304	290	34,169	32,597	3,617	3,199
Mercer	12,397	12,397	18,696	16,921	234	232	14,555	11,659	27,860	29,156
Miami	10,253	10,253	15,637	13,026	654	575	3,727	3,216	19,251	20,206
Monroe	5,008	5,008	12,394	10,667	78	86	14,060	10,942	5,555	4,281
Montgomery	15,867	15,867	19,099	18,580	633	615	3,475	2,948	23,094	23,658
Morgan	4,572	4,572	10,105	8,803	107	120	81,353	72,172	8,573	8,584
Morrow	8,379	8,379	12,290	12,290	161	199	76,893	68,078	12,956	13,905
Muskingum	9,576	9,576	20,900	19,293	453	424	107,436	99,641	9,349	9,217
Noble	5,725	5,725	13,938	12,919	154	117	68,454	54,644	4,740	4,793
Ottawa	6,764	6,764	7,797	8,945	166	29	5,783	4,631	6,768	8,728
Paulding	10,392	10,392	7,770	7,885	230	311	11,262	10,031	19,178	18,037
Perry	6,367	6,367	13,445	11,079	197	197	31,909	24,605	9,186	9,147
Pickaway	12,180	12,180	20,411	18,406	461	534	10,525	9,684	37,509	31,642
Pike	3,199	3,199	6,432	5,125	307	285	1,348	8,395	8,722	6,263
Portage	8,807	8,807	21,610	19,930	144	133	18,308	14,331	30,123	28,071
Preble	11,066	11,066	16,535	14,897	786	786	14,730	12,369	38,194	36,868
Putnam	10,873	10,873	15,259	14,312	133	151	14,730	12,262	28,536	31,680
Richland	9,957	9,957	16,011	16,011	407	440	46,479	40,103	18,311	18,700
Ross	10,856	10,856	15,937	15,096	321	376	11,467	12,344	30,802	28,744
Sandusky	9,892	9,892	12,673	11,650	68	94	11,380	14,684	18,266	22,214
Scioto	5,932	5,932	9,530	8,350	735	773	1,389	1,234	6,843	6,618
Seneca	12,391	12,391	17,233	16,522	214	200	41,026	37,311	29,603	33,236
Shelby	9,840	9,840	15,705	14,254	192	220	1,570	6,487	19,780	20,712
Stark	15,502	15,502	24,498	24,223	376	323	15,064	12,860	18,565	17,479
Summit	10,286	10,286	17,619	18,169	180	180	5,193	4,819	7,820	8,524
Tumblitt	10,236	10,236	26,937	24,470	244	251	15,234	13,178	7,256	6,587
Tuscarawas	9,353	9,353	18,914	18,195	285	285	34,362	32,345	13,410	11,450
Union	10,931	10,931	16,373	14,583	184	174	35,430	45,210	34,441	31,371
Van Wert	11,399	11,399	15,106	14,583	185	206	12,764	11,808	20,612	23,987
Vinton	2,794	2,794	5,507	4,549	267	224	21,277	20,295	1,906	2,459
Warren	9,708	9,708	14,312	15,071	396	707	9,295	10,250	26,486	24,827
Washington	7,092	7,092	15,362	14,362	170	209	42,748	39,646	5,556	5,399
Wayne	13,944	13,944	24,103	22,872	486	514	19,638	16,490	22,527	23,238
Williams	9,190	9,190	15,628	12,812	197	187	21,620	19,214	20,567	20,570
Wood	16,418	16,418	21,165	20,735	219	280	15,494	14,440	29,227	37,908
Wyandot	8,969	8,969	12,070	10,830	205	232	77,437	72,023	27,071	29,424
Totals	850,557	825,813	1,372,689	1,286,276	28,637	26,637	2,702,804	2,365,448	1,555,354	1,569,563

Horses 24,944 decrease.
 Cattle 86,363 decrease.
 Mules 2,000 decrease.
 Sheep 347,858 decrease.
 Hogs 14,309 increase.

TABLE SHOWING THE ANNUAL PRODUCTION AND PRICE OF WHEAT AND CORN FOR THE YEARS 1850 TO 1913, INCLUSIVE.

Year.	Bushels of Wheat.	Average Number of Bushels per Acre.	Price per Bushel.		Bushels of Corn.	Average Number of Bushels per Acre.	Price per Bushel.		Average.
			Range.	Average.			Range.	Average.	
1850.	31,500,000	18	\$0 70 to \$1 10	\$0 89	56,619,608	36.8	\$0 24 to \$0 51	\$0 38	
1851.	25,309,225	15.2	58 to 78	69	61,271,382	36.7	30 to 94	38	
1852.	23,043,737	14.1	59 to 63	60	58,165,517	33.6	25 to 45	39	
1853.	17,118,311	12	60 to 85	73	73,436,070	40	37 to 55	42	
1854.	11,989,110	8	85 to 170	1 19	52,171,551	26	40 to 55	49	
1855.	19,569,320	13.81	1 10 to 2 00	1 54	87,587,434	39.7	55 to 80	47	
1856.	15,333,837	10.2	1 00 to 1 70	1 27	57,802,515	27.4	32 to 63	42	
1857.	25,397,614	14.4	1 00 to 1 60	1 18	82,555,186	36.6	48 to 90	49	
1858.	17,653,483	10.4	97 to 1 00	1 15	50,863,582	27.7	25 to 61	39	
1859.	19,317,967	13.5	93 to 1 08	1 11	68,780,846	29.5	39 to 90	42	
1860.	23,640,356	13.8	85 to 1 08	1 03	91,588,704	38.2	59 to 80	52	
1861.	20,355,424	11	85 to 1 12	93	74,858,878	33.5	23 to 50	34	
1862.	20,764,887	12	82 to 1 00	86	62,704,887	30	27 to 40	31	
1863.	20,452,410	11.36	82 to 1 30	1 04	54,614,617	27	35 to 70	53	
1864.	15,541,885	9.33	1 25 to 2 12	1 41	54,053,491	27	63 to 1 29	1 03	
1865.	13,234,139	9	1 75 to 2 07	1 78	68,053,668	35	56 to 1 65	54	
1866.	5,821,747	4.5	1 95 to 3 50	2 27	80,386,320	36.5	45 to 65	54	
1867.	13,350,721	11.51	1 95 to 2 85	2 79	63,875,064	29.8	59 to 98	79	
1868.	16,480,059	11.31	1 15 to 1 98	2 31	76,725,288	34.4	57 to 1 10	92	
1869.	26,498,129	15.37	1 08 to 1 33	1 57	62,443,346	28.4	69 to 1 05	83	
1870.	18,126,341	11.29	1 10 to 1 55	1 27	88,565,299	37.5	50 to 79	56	
1871.	22,274,378	13.27	1 13 to 2 08	1 58	103,058,234	36.7	44 to 57	49	
1872.	16,981,664	12.22	1 30 to 1 80	1 56	86,363,060	35.1	39 to 50	42	
1873.	21,974,385	12.61	1 03 to 1 60	1 38	84,049,328	39.8	42 to 75	60	
1874.	26,806,818	14.51	1 03 to 1 75	1 16	101,815,494	34.1	38 to 51	44	
1875.	17,861,967	9.22	1 00 to 1 50	1 10	97,825,024	36.8	58 to 87	72	
1876.	15,354,569	10.18	85 to 2 15	1 41	112,552,642	32.5	40 to 73	51	
1877.	27,306,566	15.63	85 to 1 35	1 11	101,884,305	37.8	48 to 49	42	
1878.	35,218,783	16.58	85 to 1 15	96	114,839,107	37.8	31 to 45	37	
1879.	41,052,120	17.78	93 to 1 37	1 16	96,908,800	34	42 to 51	42	
1880.	48,540,307	17.20	88 to 1 39	1 10	105,414,504	38.9	40 to 87	49	
1881.	38,102,633	13.8	95 to 1 50	1 32	78,712,796	31	56 to 87	72	
1882.	42,112,103	15.59	95 to 1 17	1 05	90,869,137	24.2	44 to 76	54	
1883.	27,169,738	10.67	80 to 1 10	1 01	64,001,618	33.3	40 to 62	53	
1884.	36,396,119	14.4	72 to 1 09	89	87,797,813	39	37 to 59	47	
1885.	24,183,430	9.8	74 to 1 00	88	112,192,744	33.5	32 to 48	39	
1886.	37,660,681	14	71 to 89	80	88,818,556	30.5	34 to 55	40	
1887.	28,400,000	10.4	71 to 96	85	83,118,838	38.9	44 to 61	52	
1888.	26,160,994	11.17	73 to 1 05	93	111,155,506	32.3	30 to 49	37	
1889.	31,663,448	14.6	75 to 1 02	83	87,838,192	24.5	27 to 56	36	
1890.	31,509,676	13.8	73 to 1 16	99	63,694,215	33	49 to 77	60	
1891.	45,063,480	17.5	82 to 1 01	90	86,500,000	30.8	39 to 67	48	
1892.	38,381,598	14.4	73 to 93	64	81,892,100	25	37 to 45	37	
1893.	43,121,599	17.2	52 to 93	64	77,229,446	36.8	30 to 94	38	

1894.....	45,587,534	20	48 to	56	51	86,805,607	25	35 to	59	45
1895.....	28,759,647	11.9	53 to	90	66	102,447,445	33.9	24 to	56	41
1896.....	19,511,788	8.53	55 to	97	72	134,796,274	41	18 to	33	27
1897.....	36,719,686	16.15	72 to	1 00	88	103,004,970	34.34	22 to	34	28
1898.....	41,041,671	15.56	64 to	1 45	87	114,214,148	37.35	27 to	41	34
1899.....	41,468,703	14.02	68 to	77	72	115,138,669	36.74	29 to	40	36
1900.....	10,866,155	6	70 to	89	75	143,161,675	38	32 to	47	40
1901.....	31,150,373	14.57	64 to	90	77	92,368,811	25.74	39 to	74	52
1902.....	36,901,212	18.1	63 to	84	74	122,675,349	37.8	40 to	62	56
1903.....	29,074,367	14.4	70 to	93	78	92,830,349	29.1	41 to	53	45
1904.....	21,090,222	12.2	90 to	1 15	1 02	100,529,653	32.8	42 to	50	45
1905.....	32,462,786	17.3	75 to	1 14	93	108,538,592	37.8	39 to	54	46
1906.....	38,279,680	19.4	63 to	95	80	137,044,784	42.2	39 to	55	46
1907.....	30,918,367	15.4	.....	.....	.....	100,620,205	34.7	.....	.....	.....
1908.....	28,955,496	15.89	.....	.....	.....	102,632,908	36.12	.....	.....	.....
1909.....	27,393,444	15.75	.....	.....	.....	137,218,227	38.77	.....	.....	.....
1910.....	31,982,274	16	.....	.....	.....	110,803,783	31	.....	.....	.....
1911.....	30,047,056	15	.....	.....	.....	112,132,914	37	.....	.....	.....
1912 (estimated).....	10,454,425	10	.....	.....	.....	137,868,844	39	.....	.....	.....

TABLE SHOWING THE AVERAGE PRODUCTION AND PRICE OF WHEAT AND CORN BY DECADES.

Decades.	Average Bushels of Wheat.	Average Bushels per Acre.	Range of Price per Bushel.	Average Price per Bushel.	Average Bushels of Corn.	Average Bushels per Acre.	Range of Price per Bushel.	Average Price per Bushel.
1850 to 1860.....	20,023,460	12.29	\$0 58 to \$2 00	\$1 00	64,920,369	33.4	\$0 24 to \$0 90	\$0 48
1860 to 1870.....	17,584,085	10.91	60 to 3 50	1 61	68,930,426	32	27 to 1 29	64
1870 to 1880.....	24,656,959	13.29	85 to 2 15	1 27	99,986,120	36.5	38 to 1 05	54
1880 to 1890.....	34,038,945	13.21	71 to 1 50	1 00	90,991,979	33.5	30 to 37	45
1890 to 1900.....	38,042,989	15.19	48 to 1 45	77	89,648,770	32	18 to 77	39
1900 to 1910.....	28,809,210	14.50	.....	.....	111,760,155	36.64	.....	.....

**AVERAGE PRICES OF OTHER FARM PRODUCTS THAN WHEAT AND CORN IN THE LOCAL
MARKETS OF OHIO FROM 1855 TO 1912, INCLUSIVE.**

	Barley.	Oats.	Rye.	Hay.	Potatoes.
	Per Bushel.	Per Bushel.	Per Bushel.	Per Ton.	Per Bushel.
1855.....	\$1 35	\$0 29½	\$0 70	\$14 71	.....
1856.....	1 58	46	91	21 00	.....
1857.....	58	36	58	13 46	.....
1858.....	67	57	82	15 38	.....
1859.....	76	43	86	17 73	.....
1860.....	69	27	56	12 62	.....
1861.....	60	30	48	11 85	.....
1862.....	1 36	58	76	16 34	.....
1863.....	1 51	78½	1 35	27 16	.....
1864.....	1 28	52	1 15	26 00	.....
1865.....	1 41	42	1 80	12 63	.....
1866.....	1 53	57	1 28	19 76	.....
1867.....	2 11	69	1 62	14 80	.....
1868.....	2 37	64	1 28	16 42	.....
1869.....	1 26	54	92	17 44	.....
1870.....	1 00	46	91	18 45	.....
1871.....	78	37	85	20 79	.....
1872.....	87	36	76	22 18	.....
1873.....	1 51	48	93	17 16	.....
1874.....	1 41	59	1 06	20 98	.....
1875.....	1 20	38	74	17 66	.....
1876.....	90	37	74	11 67	.....
1877.....	52	29	59	9 86	.....
1878.....	1 00	27	54	10 79	.....
1879.....	89	34	82	15 87	.....
1880.....	98	38	1 04	16 36	.....
1881.....	1 05	50	94	17 90	\$1 07
1882.....	76	39	62	12 39	67
1883.....	76	34	62	11 63	46
1884.....	80	32	63	12 81	50
1885.....	86	30	63	12 16	48
1886.....	61	29	58	11 17	53
1887.....	81	33	62	14 79	88
1888.....	78	26	52	12 74	40
1889.....	57	27	50	10 56	52
1890.....	77	48	81	10 58	97
1891.....	70	33	85	11 25	45
1892.....	69	33	73	11 10	55
1893.....	64	32	55	12 55	74
1894.....	60	35	52	10 95	66
1895.....	56½	27	53	12 70	49
1896.....	36	20	36	12 83	28
1897.....	39	22	39	11 00	48
1898.....	47	27	51	8 65	57
1899.....	52	27	62	10 10	49
1900.....	51	25	59	13 95	43
1901.....	62	34	60	11 00	60
1902.....	57	37	54	10 50	65
1903.....	58	38	59	12 00	75
1904.....	59	37	60	11 50	80
1905.....	48	30	50	10 75	55
1906.....	56	32	56	12 00	44
1907.....	.....	.....	.....	.....	32
1908.....	.....	.....	.....	.....	61
1909.....	.....	.....	.....	.....	44
1910.....	.....	.....	.....	.....	45
1911.....	.....	.....	.....	.....	.....
1912.....	.....	.....	.....	.....	.....

AGRICULTURAL STATISTICS.
Gathered by Rural Township Assessors and to be Returned to the State Board of Agriculture, Columbus, as Required by Statute.
NORTHEAST SECTION.

County.	No. Townships.	How Many Tracts of Woodland or Over Fifty and Less Than One Hundred Acres?	How Many Tracts of Over One Hundred Acres?	How Many Tracts of Over Five Hundred Acres?	How Many Tracts of One Thousand Acres or More?	How Many Acres of Apple Orchards Have Been Planted During Last 3 Yrs.?	How Many Silos?	How Many Cider Mills?	How Many Sugar Mills?	How Many Clay Tile Mills?	How Many Cement Tile Mills?	How Many Deserter, Unused, Town Down, Removed Churches?	How Many House-keepers Who Do Not Farm for Them- selves, But Labor for Wages by the Day, Month or Year?	How Many Farms Are Rented Out to a Tenant?	How Many Auto- mobiles Are Owned?	How Many Farms Were Infected With Hog Cholera in 1911?	How Many Acres of Unhusked Corn in the Field on March 1, 1912?	How Many Tons of Commercial Fertilizer Were Purchased in 1911?	How Many Tons of Hay Were Stacked Out Doors in 1911?	How Many Cases of Mad Dog Biting Live Stock in 1911?
Ashland	15	23	1	0	0	182	26	10	2	1	1	2	183	566	63	2	350	9,280	529	0
Ashland	28	127	12	0	0	134	620	21	0	1	0	2	444	408	162	3	448	3,584	1,361	2
Carroll	14	21	4	0	0	285	49	11	1	1	0	3	52	166	130	8	358	1,806	375	1
Columbia	18	33	4	0	0	693	428	11	2	3	0	6	273	359	131	11	318	2,480	1,310	0
Coshoccon	22	33	4	0	0	378	192	11	1	0	2	8	251	178	47	4	500	1,628	1,825	0
Cuyahoga	17	19	4	0	0	142	163	18	0	0	1	9	338	353	117	4	339	2,470	1,394	0
Erie	9	1	0	0	0	119	63	12	2	1	1	3	484	272	107	16	500	2,868	1,232	0
Gauga	16	109	11	0	0	342	605	10	0	0	0	4	125	350	69	0	146	1,586	1,245	0
Harrison	15	16	1	0	0	384	33	12	0	1	0	1	281	222	38	0	173	1,061	449	0
Holmes	14	7	3	0	0	69	32	14	4	2	0	3	183	246	61	3	112	1,887	1,000	2
Huron	19	24	5	0	0	129	62	12	3	2	0	7	1,036	216	150	3	1,665	2,926	1,512	14
Jefferson	14	87	19	0	0	235	50	4	3	2	1	6	370	573	143	12	506	2,187	1,124	0
Knox	22	46	7	1	0	64	35	11	1	1	3	6	436	113	104	0	285	802	295	0
Lake	8	25	2	1	0	123	135	7	0	0	0	6	349	387	99	50	971	2,609	1,119	0
Lorain	21	16	2	0	0	314	339	14	1	0	3	6	436	113	104	0	285	802	295	0
Mahoning	15	20	25	0	0	173	222	10	0	0	3	7	429	292	152	8	247	3,520	1,318	1
Medina	17	25	5	0	0	103	163	6	0	2	0	5	318	362	174	10	473	4,150	923	0
Portage	20	44	5	0	0	125	379	12	0	0	1	4	439	399	116	10	447	2,446	874	6
Richland	18	58	9	0	0	77	73	16	1	3	0	6	333	642	155	24	1,015	1,963	398	0
Stark	17	6	0	0	0	-209	136	19	4	7	0	3	471	564	139	58	286	2,253	308	0
Summit	19	14	10	1	0	209	344	18	0	3	0	4	487	529	132	29	637	1,938	869	4
Trumbull	25	62	62	0	0	171	400	21	0	3	1	7	542	379	167	28	511	2,107	2,107	10
Tuscarawas	22	25	40	1	0	452	96	16	10	14	0	10	819	461	95	20	286	2,686	266	1
Wayne	16	8	0	0	0	159	49	12	2	2	0	7	312	638	96	4	745	5,557	1,973	1
	421	857	234	4	0	5,199	4,532	298	36	54	23	121	9,340	9,190	2,443	305	11,560	58,452	21,141	37

TOTALS FOR THE STATE.

1,956	3,762	1,778	76	26	23,359	8,584	1,937	672	288	101	439	40,408	43,107	10,192	7,171	108,838	169,724	69,724	128
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RURAL AGRICULTURAL STATISTICS—Continued.

SOUTHEAST SECTION.

County.	No. Townships.	How Many Tracts of Woodland of Over Fifty and Less Than One Hundred Acres?	How Many Tracts of Over One Hundred Acres?	How Many Tracts of Over Five Hundred Acres?	How Many Tracts of One Thousand Acres or More?	How Many Acres of Apple Orchards Have Been Planted During Last 3 Yrs.?	How Many Silos?	How Many Cider Mills?	How Many Sugar Mills?	How Many Clay Tile Mills?	How Many Cement Tile Mills?	How Many Deserted, Unused, Torn Down, Removed Churches?	How Many House-renters Who Do Not Farm For Themselves, But Labor For Wages by the Day, Month or Year?	How Many Farms Are Rented Out to a Tenant?	How Many Farms Were Infected With Hog Cholera in 1911?	How Many Acres of Unhusked Corn in the Field on March 1, 1912?	How Many Tons of Commercial Fertilizer Were Purchased in 1911?	How Many Tons of Hay Were Stacked Out Doors in 1911?	How Many Cases of Live Stock in 1911?	
Athens	14	71	33	8	3	635	36	28	16	0	0	7	1,122	280	35	7	131	1,980	492	1
Belmont	16	29	79	3	0	371	181	19	9	0	1	13	920	438	88	5	280	1,104	739	9
Fairfield	13	42	40	1	0	218	46	17	14	6	6	2	615	604	206	48	2,075	4,532	1,018	3
Gallia	15	35	12	3	1	927	16	52	12	2	0	0	476	200	13	0	12	1,080	974	4
Guernsey	19	29	14	0	0	193	74	18	10	1	0	1	999	284	21	7	383	1,298	974	0
Hocking	13	87	19	5	1	122	23	27	14	0	0	1	1,479	393	41	5	182	1,320	599	2
Jackson	12	45	32	4	0	161	20	109	37	0	0	11	173	144	13	0	30	1,357	3,415	3
Lawrence	14	35	16	4	5	4,317	2	38	40	0	0	3	734	138	10	4	2	1,421	254	4
Licking	26	51	8	1	0	317	252	17	7	2	1	7	870	170	217	52	2,208	3,817	2,780	4
Meigs	12	30	9	0	0	445	42	5	13	1	0	1	241	113	13	0	30	991	313	0
Monroe	18	30	18	1	0	121	16	42	17	0	0	1	280	263	59	0	76	2,500	323	0
Morgan	14	38	134	0	0	350	24	22	23	0	0	8	497	178	11	0	482	1,401	552	0
Muskingum	26	46	6	0	0	328	102	26	10	5	1	7	607	384	53	16	583	2,402	2,728	2
Noble	15	13	1	0	0	211	6	14	8	0	0	0	159	159	33	0	159	734	820	0
Perry	14	23	11	0	0	93	18	32	26	1	0	6	410	224	107	1	241	2,622	463	4
Vinton	12	62	38	1	2	199	0	9	3	0	0	2	172	97	4	4	63	778	1,476	2
Washington	22	68	131	1	0	411	12	84	8	0	1	9	410	297	56	0	63	2,370	89	0
	275	739	591	32	13	10,018	870	559	267	19	6	85	9,860	4,775	944	149	6,907	30,953	18,163	30
TOTALS FOR THE STATE.																				
	1,356	3,762	1,778	76	26	23,359	8,584	1,837	672	288	101	439	40,408	43,107	10,192	7,171	108,838	169,724	69,724	128

RURAL AGRICULTURAL STATISTICS—Continued.

NORTHWEST SECTION.

County.	No. Townships.	How Many Tracts of Fifty and Less Than One Hundred Acres?	How Many Tracts of Over One Hundred Acres?	How Many Tracts of Over Five Hundred Acres?	How Many Tracts of One Thousand Acres or More?	How Many Acres of Apple Orchards Have Been Planted During Last 3 Yrs.?	How Many Silos?	How Many Cider Mills?	How Many Sugar Cane Mills?	How Many Clay Tile Mills?	How Many Cement Tile Mills?	How Many Deserted, Unused, Torn Down, Removed Churches?	How Many House-keepers Who Do Not Farm For Them- selves, But Labor For Wages by the Day, Month or Year?	How Many Farms Are Rented Out to a Tenant?	How Many Auto- mobile Buses Are Owned?	How Many Farms Were Infected With Hog Cholera in 1911?	How Many Acres of Unshucked Corn in the Field in March 1, 1912?	How Many Tons of Commercial Fertilizer Were Purchased in 1911?	How Many Tons of Hay Were Stacked Out Doors in 1911?	How Many Cases of Mad Dog Biting Live Stock in 1911?
Allen	12	25	2	0	0	88	40	10	5	1	1	1	248	396	116	32	8391	670	337	1
Auglaize	14	25	33	0	0	51	28	7	5	1	1	2	191	619	104	128	3446	1061	153	1
Champaign	12	25	33	0	0	52	41	5	5	1	1	2	472	498	105	149	3466	1592	513	0
Crawford	16	24	24	0	0	100	51	14	4	4	4	8	126	464	93	25	3800	1976	932	1
Darke	20	16	37	0	0	123	54	16	10	6	6	17	201	386	263	298	1369	3910	87	2
Defiance	12	78	6	0	0	53	36	12	18	9	1	1	450	374	168	6	1521	504	187	2
Delaware	18	23	3	0	0	855	268	13	0	8	1	11	450	374	97	65	2554	1367	2732	3
Franklin	12	8	2	0	0	112	222	5	1	2	1	3	140	550	143	106	855	1911	222	3
Fulton	17	41	28	1	0	168	69	9	1	4	1	3	232	390	156	5	2897	2551	64	0
Hardin	15	21	5	0	0	96	28	10	4	4	4	5	301	452	142	46	3360	1146	1322	0
Henry	13	23	0	0	0	41	30	12	18	10	1	1	255	628	207	52	623	1146	1322	0
Lucas	17	44	5	0	0	58	72	12	1	5	5	5	373	597	173	65	3261	1309	821	0
Logan	12	23	0	0	0	96	117	6	2	2	2	0	366	599	114	94	2328	832	293	3
Marion	15	9	0	0	0	59	26	11	3	7	0	0	295	311	118	33	1376	736	1290	1
Mercer	14	25	20	0	0	46	50	9	8	11	3	1	184	424	172	82	1020	1027	54	0
Morrow	16	25	0	0	0	30	102	8	1	3	2	6	193	539	55	7	1499	1955	1007	0
Ottawa	12	6	0	0	0	132	28	5	1	7	3	1	615	328	103	41	780	145	163	0
Paulding	12	33	4	0	0	47	8	3	15	20	1	9	490	744	246	246	2646	79	638	0
Putnam	15	12	1	0	0	81	20	8	18	11	4	2	210	487	123	118	3478	169	169	0
Sandusky	12	6	0	0	0	221	51	13	2	11	1	9	322	776	166	12	478	30	60	0
Seneca	15	8	0	0	0	101	30	15	2	11	0	1	382	926	220	6	1219	1489	34	0
Shelby	14	13	0	0	0	36	10	9	4	5	5	1	199	689	159	30	1320	1276	10	0
Union	14	25	7	2	0	81	64	12	4	6	2	1	348	409	109	184	3967	1628	164	0
Van Wert	12	10	4	0	0	66	28	5	0	5	0	5	305	595	142	285	2400	157	343	0
Williams	12	14	0	0	0	36	68	4	2	12	3	13	131	370	130	15	454	437	93	2
Wood	20	68	14	0	0	289	121	11	2	12	5	6	1348	1711	380	113	4090	974	269	0
Wyandot	13	22	8	0	0	150	44	10	1	5	2	2	328	631	186	3	3233	2401	1644	0
TOTALS FOR THE STATE.	386	862	233	5	5	3,268	1,706	254	129	175	45	134	9,088	16,672	4,185	2,246	60,329	36,508	13,630	24

TOTALS FOR THE STATE.

1,356	3,762	1,778	76	26	23,359	8,584	1,837	672	288	101	439	40,408	43,107	10,192	7,171	108,338	169,724	69,724	128
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RURAL AGRICULTURAL STATISTICS—Concluded.

SOUTHWEST SECTION.

County.	No. Townships.	How Many Tracts of Fifty and Less Than One Hundred Acres?	How Many Tracts of Over One Hundred Acres?	How Many Tracts of Over Five Hundred Acres?	How Many Tracts of One Thousand Acres or More?	How Many Acres of Apple Orchards Have Been Planted During Last 3 Yrs.?	How Many Silos?	How Many Cider Mills?	How Many Sugar Cane Mills?	How Many Clay Tile Mills?	How Many Cement Tile Mills?	How Many Deserted, Unused, Torn Down, Removed Churches?	How Many House-keepers Who Do Not Farm For Them- selves, But Labor For Wages by the Day, Month or Year?	How Many Farms Are Rented Out to a Tenant?	How Many Auto- mobile-Blinds Are Owned?	How Many Farms Were Infected With Hor. Cholera in 1911?	How Many Acres of Unshucked Corn in the Field on March 1, 1912?	How Many Tons of Commercial Fertilizer Were Purchased in 1911?	How Many Tons of Hay Were Stacked Out Doors in 1911?	How Many Cases of Live Stock in 1911?
Adams	14	288	136	15	4	142	3	101	61	0	0	4	594	755	13	0	82	3,104	256	0
Brown	16	6	3	0	0	170	68	94	14	1	1	5	95	194	46	2	175	1,644	250	2
Butler	13	20	4	0	0	52	78	19	2	2	2	10	681	868	198	293	482	1,853	30	6
Clark	10	43	3	0	0	97	175	24	9	1	1	3	655	560	119	341	1,023	2,003	1,199	1
Clermont	14	96	17	0	0	121	157	37	2	2	2	8	597	714	41	35	721	2,053	185	0
Clinton	13	23	14	5	1	118	94	18	4	4	4	2	374	415	80	563	2,332	2,804	346	0
Fayette	10	13	6	0	0	68	18	1	0	0	0	3	596	305	132	641	4,734	2,198	2,552	1
Franklin	12	12	2	0	0	385	233	12	5	1	1	3	1,261	949	244	486	8,356	2,291	1,589	2
Greene	18	36	6	0	0	696	121	16	3	3	3	3	431	668	105	404	4,058	2,171	1,087	0
Hamilton	13	15	3	0	0	36	33	15	3	4	4	1	526	571	90	33	130	801	287	10
Highland	17	42	43	1	0	69	79	21	10	0	0	1	495	384	162	233	1,253	3,509	838	0
Madison	14	20	51	1	3	36	23	12	1	3	3	8	545	715	95	500	3,484	1,845	4,143	0
Miami	12	13	0	0	0	87	86	11	1	1	1	3	382	919	154	7	1,159	2,850	30	1
Montgomery	14	5	49	0	0	92	112	15	5	1	1	8	654	919	353	289	529	2,040	462	3
Pickaway	15	19	7	0	0	42	29	3	3	3	3	7	837	701	185	70	1,375	3,477	1,042	2
Pike	16	162	108	6	0	247	0	93	42	1	1	2	375	295	17	12	305	1,380	640	3
Preble	12	81	26	0	0	53	25	5	2	2	2	7	410	657	193	168	1,103	2,419	68	0
Ross	16	194	84	2	0	364	35	31	26	1	1	7	1,174	616	141	185	2,386	4,353	1,300	2
Scioto	16	193	153	5	0	195	34	192	44	0	0	4	972	262	50	269	204	1,551	351	4
Warren	11	23	5	0	0	190	123	7	4	1	1	1	466	773	202	269	690	1,370	32	1
TOTALS FOR THE STATE.	274	1,304	720	35	8	4,874	1,476	726	240	40	27	99	12,120	12,470	2,820	4,471	30,042	43,816	16,790	37

TOTALS FOR THE STATE.

1,356	3,762	1,778	76	26	23,359	8,584	1,837	672	288	101	439	40,408	43,107	10,192	7,171	108,338	169,724	69,724	128
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AGRICULTURAL STATISTICS.

The Following is a Summary by Sections of Three Counties in Each Having Largest and Least Totals to Following Questions, as Reported by Township Assessors.
NORTHEAST SECTION.

5.		12.		15.	
How many acres of apple orchard have been planted during the last three years?		How many house-renters who do not farm for themselves, but labor for wages by the day, month or year?		How many farms were infected with hog cholera in 1911?	
<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>
Columbiana	663	Richland	77	Stark	58
Tuscarawas	452	Holmes	69	Lorain	50
Harrison	384	Knox	64	Summit	29
		Trumbull	92	Lake	0
6.		13.		16.	
How many silos?		How many farms are rented out to a tenant?		How many acres of unhusked corn in the field on March 1, 1912?	
<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>
Ashtabula	620	Holmes	32	Huron	1,665
Gauga	605	Ashland	28	Richland	1,015
Columbiana	428	Coshocton	9	Lorain	971
11.		14.		18.	
How many deserted, unused, torn down or removed churches?		How many automobiles are owned?		How many tons of hay were stacked outdoors in 1911?	
<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>
Tuscarawas	10	Ashland	3	Trumbull	2,107
Cuyahoga	9	Harrison	1	Wayne	1,973
Coshocton	8	Lake	0	Stark	112
		Mahoning	0	Coshocton	1,625
					200

AGRICULTURAL STATISTICS—Continued.
SOUTHEAST SECTION.

5.		12.		15.	
How many acres of apple orchard have been planted during the last three years?		How many house-renters who do not farm for themselves, but labor for wages by the day, month or year?		How many farms were infected with hog cholera in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Lawrence 4,916	Hocking 122	Hocking 1,479	Jackson 173	Licking 52	Gallia 0
Gallia 927	Monroe 121	Athens 1,122	Vinton 172	Fairfield 48	Jackson 0
Athens 635	Perry 93	Belmont 920	Noble 159	Muskingum 16	Meigs 0
6.		13.		16.	
How many silos?		How many farms are rented out to a tenant?		How many acres of unhusked corn in the field on March 1, 1912?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Licking 252	Noble 6	Licking 612	Lawrence 138	Licking 2,208	Vinton 25
Belmont 181	Lawrence 2	Fairfield 604	Noble 129	Fairfield 2,075	Gallia 12
Muskingum 102	Vinton 0	Hocking 393	Vinton 97	Muskingum 528	Lawrence 2
11.		14.		18.	
How many deserted, unused, torn down or removed churches?		How many automobiles are owned?		How many tons of hay were stacked outdoors in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Fairfield 13	Guernsey 1	Licking 217	Morgan 11	Jackson 3,415	Meigs 313
Jackson 11	Meigs 1	Fairfield 200	Lawrence 10	Licking 2,780	Lawrence 254
Washington 9	Noble 0	Perry 107	Vinton 4	Muskingum 2,726	Washington 89

AGRICULTURAL STATISTICS—Continued.
NORTHWEST SECTION.

5.		12.		15.	
How many acres of apple orchard have been planted during the last three years?		How many house-renters who do not farm for themselves, but labor for wages by the day, month or year?		How many farms were infected with hog cholera in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Delaware	855 Williams	Wood	1,338 Fulton	Darke	298 Dedance
Wood	289 Shelby	Ottawa	615 Williams	Van Wert	285 Hancock
Sandusky	221 Morrow	Paulding	480 Crawford	Paulding	246 Wyandot
6.		13.		16.	
How many siles?		How many farms are rented out to a tenant?		How many acres of unhusked corn in the field on March 1, 1912?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Delaware	268 Putnam	Darke	1,719 Williams	Wood	4,990 Sandusky
Fulton	222 Shelby	Wood	1,271 Ottawa	Hardin	3,880 Henry
Wood	121 Paulding	Seneca	926 Marion	Union	3,967 Williams
11.		14.		18.	
How many deserted, unused, torn down or removed churches?		How many automobiles are owned?		How many tons of hay were stacked outdoors in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Darke	17 Allen	Wood	380 Delaware	Delaware	2,732 Sandusky
Wood	13 Ottawa	Darke	263 Crawford	Wyandot	1,644 Shelby
Delaware	11 Shelby	Seneca	220 Morrow	Hardin	1,322 Williams

AGRICULTURAL STATISTICS—Concluded.
SOUTHWEST SECTION.

<p>5. How many acres of apple orchard have been planted during the last three years?</p> <p><i>Maximum.</i></p> <p>Clermont 1,217 Greene 696 Hamilton 554</p> <p><i>Minimum.</i></p> <p>Butler 52 Pickaway 42 Madison 36</p>	<p>12. How many house-renters who do not farm for themselves, but labor for wages by the day, month or year?</p> <p><i>Maximum.</i></p> <p>Franklin 1,261 Ross 1,174 Scioto 972</p> <p><i>Minimum.</i></p> <p>Pike 375 Clinton 874 Brown 95</p>	<p>15. How many farms were infested with hog cholera in 1911?</p> <p><i>Maximum.</i></p> <p>Fayette 641 Clinton 553 Madison 500</p> <p><i>Minimum.</i></p> <p>Brown 2 Scioto 1 Adams 0</p>
<p>6. How many silos?</p> <p><i>Maximum.</i></p> <p>Franklin 238 Clark 175 Clermont 157</p> <p><i>Minimum.</i></p> <p>Fayette 18 Adams 0 Pike 0</p>	<p>13. How many farms are rented out to a tenant?</p> <p><i>Maximum.</i></p> <p>Miami 1,159 Franklin 949 Montgomery 919</p> <p><i>Minimum.</i></p> <p>Pike 285 Scioto 262 Brown 194</p>	<p>16. How many acres of unhusked corn in the field on March 1, 1912?</p> <p><i>Maximum.</i></p> <p>Ross 4,353 Highland 3,509 Pickaway 3,477</p> <p><i>Minimum.</i></p> <p>Madison 1,345 Clermont 1,153 Hamilton 301</p>
<p>11. How many deserted, unused, torn down or removed churches?</p> <p><i>Maximum.</i></p> <p>Highland 15 Butler 10 Clermont 8</p> <p><i>Minimum.</i></p> <p>Clinton 2 Pickaway 1 Warren 1</p>	<p>14. How many automobiles are owned?</p> <p><i>Maximum.</i></p> <p>Montgomery 353 Franklin 244 Warren 202</p> <p><i>Minimum.</i></p> <p>Clermont 41 Pike 17 Adams 13</p>	<p>18. How many tons of hay were stacked outdoors in 1911?</p> <p><i>Maximum.</i></p> <p>Madison 4,143 Fayette 2,552 Franklin 1,586</p> <p><i>Minimum.</i></p> <p>Butler 80 Preble 68 Miami 30</p>

STATE TOTALS.

5.		12.		15.	
How many acres of apple orchard have been planted during the last three years?		How many house-renters who do not farm for themselves, but labor for wages by the day, month or year?		How many farms were infected with hog cholera in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Lawrence	4,916	Hocking	1,479	Fayette	641
Clermont	1,217	Wood	1,338	Clinton	553
Gallia	927	Franklin	1,261	Madison	500
Delaware	855	Ross	1,174	Franklin	496
				Adams	0
				Gallia	0
				Jackson	0
				Melgs	0
				Adams	0
6.		13.		16.	
How many silos?		How many farms are rented out to a tenant?		How many acres of unhusked corn in the field on March 1, 1912?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Ashtabula	620	Darke	1,719	Ross	4,353
Geauga	605	Wood	1,271	Wood	4,080
Columbiana	428	Miami	1,159	Hardin	3,980
Trumbull	400	Franklin	949	Union	3,967
				Lawrence	2
11.		14.		18.	
How many deserted, unused, torn down or removed churches?		How many automobiles are owned?		How many tons of hay were stacked outdoors in 1911?	
Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Darke	17	Wood	380	Madison	4,143
Highland	18	Montgomery	353	Miami	3,415
Fairfield	18	Darke	263	Jackson	2,780
Wood	13	Franklin	244	Licking	2,739
				Delaware	2,739
				Williams	18
					30
					20
					10
					18
					19

The township assessors of following counties and townships have failed to make out and forward their report to this office at time of going to press—July 26:

COSHOCTON COUNTY:

Crawford, Jefferson, Lafayette, Millcreek, Monroe and Oxford townships.

CLINTON COUNTY:

Wayne township.

LAWRENCE COUNTY:

Ald and Windsor townships.

AGRICULTURAL STATISTICS

NORTHEAST SECTION.

Counties.	Wheat.		Rye.		Buckwheat.	
	Acres sown for harvest 1911.	Bushels produced 1911.	Acres sown for harvest 1912.	Acres sown for 1911.	Acres sown for 1912.	Bushels produced 1911.
Ashland.....	28,334	285,536	23,115	259	1,212	477
Ashtabula.....	7,821	93,325	7,408	577	999	70,589
Carroll.....	13,853	141,356	13,289	52	121	541
Columbiana.....	20,660	256,377	18,474	215	233	610
Coshocton.....	24,528	315,926	23,791	242	744	670
Cuyahoga.....	6,555	102,895	5,916	238	216	172
Erie.....	16,066	319,845	14,908	342	646	4,602
Geauga.....	5,103	61,065	4,249	126	177	13,274
Harrison.....	9,448	131,930	9,665	57	157	175
Holmes.....	24,467	348,020	21,338	230	362	
Huron.....	32,410	443,947	30,427	72	122	1,183
Jefferson.....	10,347	135,335	10,418	251	446	830
Knox.....	26,876	385,419	27,116	904	2,100	65
Lake.....	3,509	37,903	3,053	798	404	5,130
Lorain.....	20,361	328,895	10,375	125	98	
Mahoning.....	15,372	188,363	10,400	72	151	747
Medina.....	24,558	283,196	14,499	153	38	917
Portage.....	19,665	268,868	16,617	123	418	7,459
Richland.....	33,051	314,547	29,332	351	1,677	75
Stark.....	40,366	552,183	38,944	245	17	415
Summit.....	20,369	292,698	16,669	72	89	1,327
Trumbull.....	11,629	139,681	7,213	314	147	18,522
Tuscarawas.....	22,785	244,983	20,893	276	1,092	70
Wayne.....	50,791	705,398	38,458	152	51	180
Totals.....	489,024	6,387,691	420,267	6,246	10,855	127,830

STATE TOTALS.

1,973,742	30,047,056	1,766,042	58,166	716,600	85,624	10,937	193,273
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AGRICULTURAL STATISTICS—Continued.

Counties.	Oats.		Winter Barley.		Spring Barley.	
	Acres sown 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Acres sown for 1912.
Ashland.....	19,202	21,732		10		97
Ashabula.....	26,708	28,159	5	65	646	23
Carroll.....	13,825	14,162			829	8
Columbiana.....	19,916	20,797	16	4		
Cuyahoga.....	11,626	10,333				
Erie.....	11,527	12,372			2	
Geauga.....	14,311	12,372	18	430	510	16
Harrison.....	15,193	19,288			10,228	755
Holmes.....	7,984	16,318			165	14
Huron.....	18,314	8,025			30	4
Jefferson.....	28,427	18,040	6	37	690	33
Knox.....	10,951	33,056	7	60	1,574	89
Lake.....	8,280	10,963			100	4
Lorain.....	8,135	9,508			2	3
Mahoning.....	22,159	7,769			43	16
Medina.....	14,991	30,032	415	13,760	215	204
Portage.....	21,721	23,493	17	55		43
Richland.....	21,252	27,502	3	14	2	2
Stark.....	23,693	23,812	11	297	60	20
Summit.....	31,392	28,289	2	50	12	20
Trumbull.....	18,580	32,142	6	19	36	6
Tuscarawas.....	20,542	20,332			6	
Wayne.....	10,125	24,104	4	60	120	
Totals.....	437,328	437,286	510	14,851	707	1,408
					20,032	

STATE TOTALS.

1,431,120	47,837,403	1,835,024	2,347	60,415	3,768	21,107	507,407	32,646
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AGRICULTURE STATISTICS—Continued.

Counties.	Corn.		Ensilage Corn.		Broom Corn.		Sugar Corn		
	Acres planted 1911.	Bushels (shelled) produced 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Pounds broom brush produced 1911.	Acres planted 1911.	Tons produced 1911.
Ashland.....	23,717	82,414	23,990	140	134			23	80
Ashtabula.....	15,611	553,684	17,163	5,262	5,716				
Carroll.....	13,110	493,151	13,315	197	256			19	42
Columbiana.....	17,815	559,820	16,463	2,926	3,298		300	8	21
Coshocton.....	25,908	846,549	23,526	49	56			60	4,038
Cuyahoga.....	7,030	249,594	6,438	2,029	2,076			207	811
Erie.....	16,936	619,503	17,454	335	340	21	12,600	18	4
Geauga.....	8,417	293,745	8,718	5,140	5,567			30	72
Harrison.....	11,588	449,258	10,606	186	175				
Holmes.....	22,606	844,685	21,543	84	119	1	188	24	20
Huron.....	32,337	1,009,503	32,124	349	454	1	500	38	140
Jefferson.....	11,249	394,953	11,027	451	447	2	900		
Knox.....	33,169	1,111,704	34,188	143	106	1	400		
Lake.....	7,132	229,960	7,050	700	702			421	12,842
Lorain.....	19,376	716,391	21,385	3,368	3,627			37	63
Madison.....	21,074	247,632	12,237	2,076	2,170	58	65	31	27
Medina.....	15,076	824,125	20,164	1,449	1,288	3	3	9	1
Portage.....	15,616	580,539	16,265	3,520	3,806			8	14
Richland.....	29,622	1,012,859	30,407	548	557	1	200	3	3
Stark.....	29,547	1,203,127	29,228	1,210	1,144			33	67
Summit.....	15,691	618,136	15,109	3,107	3,089			28	239
Tuscarawas.....	15,186	526,816	16,155	3,757	3,840			10	103
Trumbull.....	20,537	691,185	19,573	256	251			1	1
Wayne.....	39,230	1,719,495	41,514	170	258				
Totals.	464,643	16,835,128	465,584	37,445	39,456	88	15,156	1,041	18,858

STATE TOTALS.

3,021,668	112,122,314	3,167,457	55,501	56,390	483	127,418	19,474	68,858
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STATE TOTALS.

3,021,668	112,122,314	3,167,457	55,501	56,390	483	127,418	19,474	68,858
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AGRICULTURAL STATISTICS—Continued.

Counties.	Tomatoes.		Peas.		Irish Potatoes.		Sweet Potatoes.	
	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Pounds produced 1911.	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Bushels produced 1911.
Ashland								
Ashtabula	96	22,027		1,000	843	68,315		788
Carroll					3,708	342,694		3,892
Columbiana	184	2,512		6,900	4,142	56,660		557
Coshocton	1	400	31	7,850	2,707	285,982		3,497
Cuyahoga	111	20,363	19	12,500	1,159	67,350	1	1,187
Erie	50	14,830			10,601	578,816		5,783
Geauga	4	1,050			3,220	323,794		3,502
Harrison			9	11,000	2,754	289,778		2,837
Holmes					222	11,569		143
Huron	1	108			769	77,959		660
Jefferson	24	4,765	861	13,110	1,587	158,153		1,528
Knox			2	780	660	30,977	1	506
Lake					660	56,254		517
Lorain	9	995			1,981	156,444		1,691
Madison	99	24,805			3,233	318,008		3,125
Medina	37	8,725			2,691	233,404	1	2,384
Portage	34	850	3	3,600	3,310	351,943	3	3,138
Richland	39	1,075			6,891	677,026		5,354
Stark			7		2,179	214,253		2,094
Summit	45	6,522		1,200	3,836	373,186		4,547
Trumbull	36	5,505	4	13,300	3,507	372,694		3,363
Tuscarawas	15	3,540	2	3,020	3,403	269,231		3,190
Wayne	37	8,275	1	3,400	1,901	124,743	1	1,602
	6	495	1	102	4,444	405,249		3,516
Totals	631	123,842	922	77,762	68,446	5,316,702	7	58,939

STATE TOTALS.

5,995	954,527	3,918	2,999,657	145,692	9,368,922	364	35,063
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AGRICULTURAL STATISTICS—Continued.

Counties.	Onions.		Meadow.		Clover.			
	Acres planted 1911	Bushels produced 1911.	Acres in grass (other than clover) 1911.	Tons of hay produced 1911.	Acres grown in 1911.	Tons of hay produced 1911.	Bushels of seed produced 1911.	Acres plowed under for manure 1911
Ashland.....	8	2,700	29,504	33,006	14,801	16,360	563	85
Ashabula.....	110	30,949	55,312	58,361	438	624	13	35
Carroll.....			35,234	26,037	3,361	2,659	367	8
Columbiana.....	5	717	40,357	34,499	8,017	8,440	185	4
Coshocton.....	1	138	36,916	28,837	6,195	5,380	247	73
Cuyahoga.....	14	2,675	20,469	24,801	1,050	1,310	38	11
Erie.....	43	1,187	10,167	10,138	6,406	5,167	810	585
Geauga.....	9	2,226	27,111	31,396	420	460	15	9
Harrison.....			31,025	20,932	1,630	1,372	91	27
Holmes.....		4,380	19,826	29,570	12,030	18,345	1,451	78
Huron.....	16	711	28,849	31,762	19,773	17,082	1,852	25
Jefferson.....	6	1,000	25,260	16,014	3,384	2,821	177	69
Knox.....	588	151,592	36,711	33,645	8,341	7,326	148	30
Lake.....	5	2,608	12,293	12,931	7,573	8,108	113	103
Lorain.....	13	1,210	36,345	38,928	2,567	3,394	567	62
Madison.....	43	10,647	29,814	35,322	7,573	8,108	266	253
Medina.....	164	62,825	33,162	45,848	11,058	13,457	1,462	69
Portage.....			30,774	36,093	3,375	3,394	371	136
Richland.....	3	610	25,746	29,262	16,743	16,429	274	240
Stark.....	87	24,386	41,710	46,643	9,761	10,840	12	12
Summit.....	57	16,897	21,717	28,405	7,656	9,270	274	34
Trumbull.....	15	3,710	59,432	54,542	1,029	1,338	974	2,164
Tuscarawas.....	7	685	40,348	33,022	5,108	4,339	1,865	
Wayne.....	219	74,680	27,242	38,021	27,446	33,456		
Totals.....	1,419	395,343	755,334	778,015	177,511	188,413	11,275	4,112

STATE TOTALS.

5,760	1,548,370	2,067,798	1,894,287	643,240	538,873	124,757	107,065
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STATE TOTALS.

5,750	1,548,370	2,087,798	1,884,287	643,240	538,873	194,757	107,065
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AGRICULTURAL STATISTICS—Continued.

Counties.	Alfalfa.		Flax.			Tobacco.		Milk.
	Acres grown in 1911.	Tons of hay in 1911.	Acres sown 1911.	Bushels of seed 1911.	Pounds of fibre 1911.	Acres planted 1911.	Pounds produced 1911.	
Ashland.....	2	5	680	4,951	199,500			78,155
Ashtabula.....	18	34					1,870	5,339,789
Carroll.....	14	39						97,990
Columbiana.....	47	103						1,507,514
Coshocton.....	249	695						126,300
Cuyahoga.....	13	21						2,868,170
Erie.....	289	636						540,113
Geauga.....	16	37						6,103,928
Harrison.....	183	323					3,500	113,430
Holmes.....								287,270
Huron.....	46	107	427	3,189	238,220			448,494
Jefferson.....	142	311						805,910
Knox.....	146	371						429,906
Lake.....	254	551				13	17,600	673,260
Lorain.....	84	171	103	1,025	59,000			3,659,794
Mahoning.....	13	28						1,040,486
Medina.....	91	313	53	485	6,026	68	106,200	675,787
Portage.....	47	96						1,336,508
Richland.....	20	64	59	559	270,000			809,911
Stark.....	27	75						2,309,042
Summit.....	57	148				1	48	4,019,222
Trumbull.....	37	101						2,357,097
Tuscarawas.....	45	132						496,976
Wayne.....	29	86	10	2		93	134,090	519,562
Totals.....	1,869	4,448	1,332	10,211	529,746	175	263,308	36,634,642

25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	69,351,938
STATE TOTALS.							

STATE TOTALS.

	25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	69,351,938
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AGRICULTURAL STATISTICS—Continued.

Counties.	Butter.		Cheese.		Eggs.		Sorghum.	
	Pounds made in home dairies. 1911.	Pounds made in factories and creameries 1911.	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Number dozen produced 1911.	Number dozen shipped beyond state 1911.	Acres planted 1911.	Pounds of sugar 1911.
Ashland.....	464,676	136,120		31,300	978,997	150		
Ashtabula.....	607,228	648,690	139,810	974,805	1,150,232	73,310		
Carroll.....	603,279	129,045	4,000		810,287		3	130
Columbiana.....	707,063	156,063	130	306,964	872,503	33,050		
Coshocton.....	572,210	106,800	47,160	7,050	1,055,875		†	20
Cuyahoga.....	380,882	47,350	200		641,694	550		
Erie.....	329,138	8,010	6,001	1,350	420,208			
Geauga.....	113,701	150		127,720	826,344			
Harrison.....	411,911	58,670	310		550,755	800	†	
Holmes.....	587,930	180,620	13,730	318,390	1,463,190	11,175	2	452
Huron.....	526,504	92,186	5,400	200	969,941		7	369
Jefferson.....	482,660	22,370	100		479,818	1,870	2	17
Knox.....	683,756	18,290	†		1,095,820		14	162
Lake.....	289,233	13,625	†		325,401	60		
Lorain.....	507,905	252,984	7,100	431,879	1,011,453	725	150†	423
Mahoning.....	681,239	469,610	6,000	104,200	922,711			
Medina.....	660,254	603,012	5,560	169,955	1,146,275		1	70
Portage.....	593,139	179,157	856	256,592	1,039,350	345		
Richland.....	802,703	62,025	1,750		917,435	365		
Stark.....	860,342	177,072	21,270	303,025	1,037,553	8,100	314	57
Summit.....	592,552	179,495	2,500	104,050	766,736	266	42	42
Trumbull.....	675,250	224,471	27,112	408,461	1,042,091	20,180		
Tuscarawas.....	544,463	54,666	54,666	584,017	700,921	50,805	3	781
Wayne.....	871,511	362,029	22,302	254,576	1,654,418	54,800	4†	528
Totals.....	13,349,529	4,182,510	366,031	4,387,534	21,880,708	256,551	543	3,061

STATE TOTALS.

46,152,997	15,363,573	765,280	5,094,617	81,133,895	1,578,796	1,794	2,384	68,450
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AGRICULTURAL STATISTICS—Continued.

Counties.	Maple Products.		Honey.		Bees.	Commercial Fertilizers.		
	Number of trees from which sugar or syrup was made 1912.	Pounds of sugar 1912	Gallons of syrup 1912.	Pounds of honey 1911.		Pounds used during 1911.	Cost of fertilizer used during 1911.	Estimated pounds to be used during 1912.
Ashland.....	65,638	999	7,029	3,810	247	3,985,650	\$39,258	3,312,670
Ashtabula.....	255,244	13,002	66,714	35,204	847	7,174,209	81,664	6,138,645
Carroll.....	615	5	301	2,027	200	2,778,965	30,296	1,870,490
Columbiana.....	18,922		2,710	1,170	102	4,866,255	53,336	3,921,411
Coshocton.....	485	30	272	4,260	230	3,210,565	34,276	1,922,035
Cuyahoga.....	62,542	650	14,178	668	71	4,409,252	85,996	4,281,259
Erie.....	7,125		1,624	830	38	2,974,800	33,531	1,969,000
Geauga.....	647,503	9,855	197,646	1,275	246	3,799,000	44,698	3,942,530
Harrison.....	960	10	336	1,287	151	1,050,695	208,368	487,328
Holmes.....	4,065	50	1,680	5,450	283	3,416,990	34,658	3,376,715
Huron.....	46,518	10	5,997	4,026	513	6,786,400	70,166	5,638,670
Jefferson.....	1,813		628	988	133	1,531,410	15,170	1,080,150
Lake.....	23,484	71	4,276	3,558	172	5,700,325	51,016	3,706,630
Knox.....	31,700	3,275	7,990	1,296	87	2,664,350	29,160	1,989,025
Lorain.....	67,262	550	7,229	910	112	5,063,900	54,340	6,138,175
Madison.....	71,163		7,846	385	98	4,460,102	50,905	4,010,868
Medina.....	200,205	4,099	31,755	579	309	7,850,737	80,115	6,833,699
Portage.....	321,466	145	78,341	1,445	310	7,056,996	65,513	5,263,866
Richland.....	48,100	44	7,012	1,487	195	4,226,085	42,732	3,107,300
Stark.....	11,882	15	2,211	1,201	118	7,339,680	81,163	5,406,410
Summit.....	41,152	1,633	8,374	2,903	360	4,851,870	53,525	3,935,467
Trumbull.....	201,918	5,251	43,168	2,785	248	4,491,180	48,076	4,344,118
Tuscarawas.....	853		249	1,509	79	2,739,529	27,516	1,333,855
Wayne.....	17,967	48	2,702	4,143	396	11,076,560	112,976	9,445,228
Totals.....	2,148,582	39,772	499,968	83,186	5,532	113,505,405	\$1,429,254	92,461,544

STATE TOTALS.

	2,516,977	42,836	583,351	309,523	26,287	320,152,047	\$3,895,915	221,897,745
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AGRICULTURAL STATISTICS—Continued.

Counties.	Grapes and Wine.					Orchards.		
	Acres (new) vineyard 1911.	Whole No. of acres in vineyard 1911.	Pounds of grapes gathered in 1911.	Gallons of wine pressed 1911.	Acres occupied 1911.	Bushels produced 1911.	Apples.	Peaches.
Ashland.....	41	594	1,079,275		2,361	80,530		87
Ashtabula.....					2,978	121,930		354
Carroll.....					4,164	289,233		115
Columbiana.....				70	2,146	291,654		153
Coshocton.....					4,762	271,335		313
Cuyahoga.....	42	530	1,960,020	1,000	2,512	84,283		40
Erie.....	9	1,385	4,631,600		1,987	125,077		895
Geauga.....	34	22	22,750		1,994	91,979		470
Harrison.....					5,691	138,446		136
Holmes.....					3,031	34,516		116
Huron.....		35	4,760		2,820	180,178		40
Knox.....					3,026	108,189		244
Lake.....	70	9,401			2,450	134,866		154
Lorain.....	45	1,061	1,254,010	3,025	1,875	88,542		1,360
Mahoning.....			3,274,100	20,000	2,557	188,217		554
Medina.....	12	274	62,700	24	3,699	206,824		159
Portage.....	121	25	725		2,879	135,225		424
Richland.....	2	8	23,000		3,246	214,397		18
Stark.....	1	1	2,225		3,292	123,611		112
Summit.....	18	8	23,800		5,063	370,399		1,111
Tuscarawas.....	4	21	40,000	210	2,866	184,092		39
Wayne.....			15,600		3,702	255,953		109
Totals.....	398	13,145	12,443,620	24,329	5,468	415,216		201
					4,795	265,204		149
					83,287	4,680,481		4,528
								111,177

STATE TOTALS.

589	20,514	18,836,871	39,396	271,907	12,746,045	17,566	690,044
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AGRICULTURAL STATISTICS—Continued.

Orchards—Continued.								
Counties.	Pears.		Cherries.		Plums.		Other Small Fruits.	
	Acres occupied 1911.	Bushels produced 1911.	Acres occupied	Bushels produced 1911.	Acres occupied 1911.	Fushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.
Ashtabula.....	9	681	12	1,136	4	217	17	1,405
Ashland.....	75	5,832	11	665	14	881	83	3,843
Carroll.....	1	363	7	982	6	672	26	2,005
Columbiana.....	81	3,565	46½	3,097	35	846	287	17,712
Coshocton.....	24	976	21	300	11	225	10½	400
Cuyahoga.....	100	976	36	1,870	24	673	27½	15,900
Erie.....	124	12,495	59	3,794	25	1,333	201	8,583
Geauga.....	110½	9,326	77½	1,277	9½	227	18½	790
Harrison.....	40	330	22	38	9	361	15	501
Holmes.....	4	400	7	4,769	3	102	2	132
Huron.....	5	224	14	541	1	13	13	1,085
Jefferson.....	19	501	244	5,921	21	138	48	1,345
Knox.....	303	19,477	10	431	3	65	17	888
Lake.....	44	7,655	39	1,621	68	788	110	6,670
Lorain.....	150	10,239	50	3,123	36	1,670	198	9,825
Madison.....	17	1,363	15	2,343	37½	2,104	55	7,818
Medina.....	16	2,309	25	2,485	36	523	25	1,012
Portage.....	54	3,770	33	1,588	36½	273	18	1,215
Richland.....	37	3,722	46	4,373	17	410	38	2,845
Stark.....	32	2,223	28	2,246	5	930	57	4,939
Summit.....	48	4,082	14½	647	26	1,420	47	3,780
Trumbull.....	7	1,529	13	2,352	14	757	59	3,602
Tuscarawas.....	59	3,373	38½	2,934	14½	1,671	43	3,319
Wayne.....								
Totals.....	1,308	101,220	780	42,909	470	16,484	1,680	101,214

STATE TOTALS.				
5,134	245,566	2,368	113,538	1,895
			58,329	5,089
				261,464

AGRICULTURAL STATISTICS—Continued.

Counties.	Lands Owned in 1911.					Horses.		Cattle.			
	Number of acres cultivated.	Number of acres pasture.	Number of acres woodland.	Number of acres lying waste.	Total number of acres owned.	Number owned in April, 1912.		Beef cattle owned in April, 1912.	Milch cows owned in April, 1912.	All other cattle owned April, 1912.	Total number owned in April, 1912.
Ashland.....	100,514	82,411	30,751	5,407	219,083	6,099		349	6,750	3,985	11,084
Ashland.....	132,701	145,757	42,832	9,503	330,793	9,817		102	20,124	7,783	28,019
Carroll.....	42,861	99,838	19,512	7,155	211,217	5,257		575	4,033	7,783	11,049
Columbia.....	83,618	133,909	26,948	8,658	253,034	7,780		232	13,445	3,791	17,468
Columbia.....	61,319	191,954	40,940	8,447	305,771	4,237		465	6,873	5,513	12,762
Cuyahoga.....	64,754	38,003	10,964	10,207	124,928	4,499		134	7,457	1,762	9,353
Erie.....	67,464	31,726	7,726	6,895	113,811	4,858		107	4,389	1,894	6,273
Geauga.....	71,689	90,313	36,471	2,543	201,016	5,328		147	13,629	6,551	20,327
Harrison.....	64,558	122,838	21,618	5,989	215,003	4,456		447	5,306	3,449	9,202
Holmes.....	167,552	32,755	45,531	8,872	254,710	7,449		730	8,520	4,434	13,731
Huron.....	108,890	72,783	29,961	6,029	217,663	8,357		281	7,220	4,307	11,808
Jefferson.....	72,247	87,584	7,659	10,831	198,371	4,328		346	5,952	2,570	8,868
Knox.....	72,542	163,765	32,157	2,653	266,117	7,728		1,204	7,205	4,408	12,816
Lake.....	45,101	23,354	13,343	6,726	88,524	4,850		241	5,276	1,771	7,290
Lorain.....	81,463	116,555	19,840	4,577	222,435	8,260		137	12,012	4,378	16,527
Madison.....	67,732	77,581	19,110	3,157	167,580	6,945		983	10,657	4,325	15,945
Medina.....	84,081	112,728	27,011	3,130	226,931	7,755		146	10,437	4,717	15,300
Portage.....	88,508	119,888	30,985	10,546	249,927	8,990		207	13,736	5,221	19,330
Richland.....	133,085	77,836	39,094	4,105	254,120	7,816		89	9,782	4,310	14,181
Stark.....	177,708	68,921	22,310	8,588	277,683	10,772		351	15,582	5,991	21,921
Summit.....	101,455	63,253	17,338	8,614	190,760	6,447		187	11,204	4,680	16,080
Thurston.....	115,587	135,598	37,584	4,747	293,514	8,858		156	16,917	7,164	24,137
Tuscarawas.....	76,727	161,089	34,051	11,963	283,840	6,810		556	10,519	5,532	16,607
Wayne.....	215,269	48,676	33,636	7,482	305,063	11,468		529	13,165	7,860	21,554
Totals.....	2,292,433	2,300,213	667,272	166,874	5,471,914	171,364		8,681	242,308	110,428	362,235

STATE TOTALS.

8,819,858	7,559,913	2,265,531	759,634	19,640,316	659,402	44,020	695,746	421,971	1,164,235
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AGRICULTURAL STATISTICS—Continued.

Counties.	Sheep.			Hogs.		Wool
	Number owned April, 1912	Killed by dogs 1911.	Value 1911.	Injured by dogs 1911.	Value 1911.	
Ashtabula.....	27,635	188	\$716	70	\$220	
Ashtabula.....	8,454	302	2,231	92	313	238,088
Carroll.....	49,773	503	1,447	89	184	49,799
Columbiana.....	20,349	149	444	48	50	1,468
Coshocton.....	81,509	315	945	97	240	387,203
Cuyahoga.....	2,467	236	1,553	145	421	136,678
Erie.....	9,706	157	244	33	89	732,057
Geauga.....	3,973	106	505	15	60	19,147
Harrison.....	97,354	302	706	105	162	2,171
Holmes.....	24,196	284	1,287	147	294	60,447
Huron.....	52,501	286	1,276	105	249	24,245
Jefferson.....	40,972	590	1,587	150	407	776,994
Knox.....	102,157	248	780	58	187	330
Lake.....	3,172	138	632	42	140	4,043
Lorain.....	13,288	115	572	113	235	4,432
Mahoning.....	15,974	161	565	29	67	324,127
Medina.....	16,325	49	221	19	86	1,054,975
Portage.....	14,331	224	1,217	91	290	9,005
Richland.....	35,316	239	1,040	93	205	107,820
Stark.....	10,444	126	467	33	123	327
Summit.....	4,219	135	549	18	52	114,978
Trumbull.....	12,485	347	1,525	137	368	112,803
Tuscarawas.....	25,682	498	1,345	154	202	112,224
Wayne.....	15,414	132	566	99	212	2,770
Totals.....	687,696	5,830	\$22,421	1,982	\$4,856	268,008
						76,209
						511
						20,214
						72,337
						184,974
						102,715
						5,636,978

STATE TOTALS.

2,098,213	17,630	\$67,959	7,134	\$16,613	1,401,223	398,952	15,711,368
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AGRICULTURAL STATISTICS—Continued.

Domestic Animals Died from Diseases in 1911.									
Counties.	Horses.		Cattle.		Sheep.		Hogs.		Value.
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
Ashland.....	97	\$9,550	99	\$2,838	518	\$1,753	231	\$1,292	
Ashtabula.....	251	20,456	321	11,087	276	1,097	233	1,059	
Carroll.....	181	9,325	102	2,096	726	1,528	133	1,031	
Columbiana.....	154	14,220	173	5,870	224	1,508	268	4,023	
Coshocton.....	150	11,515	171	3,455	1,077	2,398	200	1,202	
Cuyahoga.....	214	15,583	220	8,015	313	502	151	1,245	
Elie.....	120	19,381	68	2,317	119	843	465	4,444	
Geauga.....	160	12,230	203	7,800	118	443	96	828	
Harrison.....	191	17,191	63	1,678	941	1,983	38	1,778	
Holmes.....	86	11,350	122	3,234	402	1,439	164	1,340	
Huron.....	211	19,311	149	4,364	931	3,102	423	3,274	
Jefferson.....	113	10,770	126	4,384	506	1,093	446	3,821	
Knox.....	99	9,765	98	2,804	728	1,916	236	2,059	
Lake.....	62	6,535	74	2,503	51	241	100	718	
Lorain.....	219	19,615	239	11,784	176	505	457	4,719	
Mahoning.....	496	8,783	220	4,450	188	587	155	1,418	
Medina.....	134	15,765	88	3,164	167	575	224	1,690	
Portage.....	239	18,822	318	8,010	329	1,066	139	1,571	
Richland.....	150	17,014	137	3,781	765	2,174	562	3,792	
Stark.....	332	30,797	311	8,707	389	1,158	982	7,603	
Summit.....	351	16,509	218	7,820	111	1,782	509	4,259	
Trumbull.....	171	15,091	192	7,460	196	664	167	1,573	
Tuscarawas.....	151	13,169	233	6,067	469	1,065	282	2,289	
Wayne.....	271	27,326	250	7,180	617	2,277	408	3,593	
Totals	4,503	\$352,573	4,197	\$129,652	10,287	\$30,707	7,151	\$60,399	

STATE TOTALS.			
21,328	\$1,647,595	16,226	\$451,991
		51,858	\$161,097
		212,584	\$1,332,212

AGRICULTURAL STATISTICS. SOUTHEAST SECTION.

Counties.	Wheat.		Rye.		Buckwheat.	
	Acres sown for harvest 1911.	Bushels produced 1911.	Acres sown for harvest 1912.	Acres sown for 1911.	Acres sown for 1912.	Bushels produced 1911.
Athens.....	7,391	105,275	7,715	41	131	363
Belmont.....	15,331	191,523	15,217	265	726	2,771
Fairfield.....	45,314	845,323	49,817	351	555	5,489
Gallia.....	10,862	90,765	9,625	472	807	5,916
Guernsey.....	12,334	151,706	11,925	292	610	2,999
Hocking.....	10,768	136,362	11,123	108	148	948
Jackson.....	8,429	77,993	7,452	71	224	386
Lawrence.....	2,470	17,550	2,348	48	164	345
Licking.....	35,905	576,993	32,419	1,927	3,149	23,764
Meigs.....	11,269	140,687	10,267	79	211	559
Monroe.....	12,771	138,147	13,147	505	826	5,752
Morgan.....	10,876	169,984	11,504	78	128	997
Muskingum.....	22,304	351,930	23,729	313	49	330
Noble.....	4,835	110,433	10,593	80	578	330
Perry.....	15,671	255,452	16,939	200	11	139
Vinton.....	6,119	68,635	6,750	17	85	278
Washington.....	17,420	255,144	17,743	157	313	2,796
Totals.....	255,069	3,683,902	258,313	5,034	9,146	1,572
				2,678		59,116

STATE TOTALS.

1,973,742	30,047,056	1,766,042	58,166	85,624	193,273
				10,937	

AGRICULTURAL STATISTICS—Continued.

Counties.	Oats.			Winter Barley.			Spring Barley.		
	Acres sown 1911.	Bushels produced 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres sown for 1912.
Athens.....	2,019	34,652	2,387						
Belmont.....	10,971	220,291	11,704	20	250	6	29	31	
Fairfield.....	2,497	45,601	4,064	5	160	11	32	405	26
Gallia.....	2,726	34,281	2,531			2			
Guernsey.....	6,066	113,574	6,751	17	374	28	2	29	4
Hocking.....	1,671	19,746	1,767						
Jackson.....	1,789	23,333	1,569			6			
Lawrence.....	3,563	25,494	2,908						
Licking.....	7,728	123,734	10,177			21			6
Meigs.....	2,719	45,231	2,376	6					17
Monroe.....	7,783	154,929	7,604	7	107	5			6
Morgan.....	2,568	49,396	2,338						7
Muskingum.....	5,711	107,955	5,550				7	73	20
Noble.....	3,253	63,110	3,963	11	379	11	2	30	7
Perry.....	2,334	45,893	2,614						
Vinton.....	1,968	25,171	1,624						
Washington.....	8,326	128,048	6,813				7	156	4
Totals.....	73,692	1,280,439	76,760	66	1,270	90	79	724	105
STATE TOTALS.									
	1,431,120	47,837,403	1,835,024	2,347	60,415	3,768	21,197	507,407	32,646

AGRICULTURAL STATISTICS—Continued.

Counties.	Corn.			Ensilage Corn.		Broom Corn.		Sugar Corn.	
	Acres planted 1911.	Bushels (shelled) produced 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Pounds broom brush produced 1911.	Acres planted 1911.	Tons produced 1911.
Athens.....	12,438	349,778	11,906	179	145			13	35
Belmont.....	19,140	610,343	18,366	1,328	1,251	1	287	84	126
Fairfield.....	51,968	2,020,727	49,945	14	20	2	1,200	366	871
Gallia.....	19,775	393,969	20,496	50	70			8	15
Guernsey.....	16,378	527,923	15,570	359	359				
Hocking.....	12,657	296,238	12,329	36	34				
Jackson.....	13,342	260,121	12,359	61	70	1	200	1	20
Lawrence.....	14,486	219,295	13,745	55	42			61	135
Licking.....	49,913	1,722,082	49,538	728	705	4	2,000	84	328
Meigs.....	14,025	352,371	12,626	192	271	2	370	3	2
Monroe.....	16,753	446,741	16,310	110	101	1	45	5	5
Morgan.....	14,132	478,470	12,874	118	149	13	2,000	73	102
Muskingum.....	27,836	962,202	26,222	652	520	1	300		
Noble.....	15,980	538,616	14,899	43	36			13	48
Perry.....	25,682	628,563	17,246	75	77				
Vinton.....	12,604	234,962	11,508	52	10			90	158
Washington.....	19,861	556,807	17,412	97	102	1	50		
Totals.....	356,970	10,601,208	333,351	4,149	3,962	27	6,452	801	1,845

STATE TOTALS.				
3,021,668	112,122,314	3,167,457	55,501	56,390
483	127,418	19,474	68,858	

AGRICULTURAL STATISTICS—Continued.

Counties.	Tomatoes.		Peas.		Irish Potatoes.			Sweet Potatoes.	
	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Pounds produced 1911.	Acres planted 1911.	Bushels produced 1911.	Acres (estimated) for crop of 1912.	Acres planted 1911.	Bushels produced 1911.
Athens.....	1½	250	82	102,000	543	22,426	462		
Belmont.....	80	11,760	128	14	840	31,626	643		42
Fairfield.....	80	13,060	102	180,700	798	37,001	537	3	110
Gallia.....	30	3,845		20,500	233	35,763	150		25
Guernsey.....					277	1,202	153		
Hocking.....					537	32,539	509		
Jackson.....			6	360	164	8,811	101		
Lawrence.....	24	2,445	61	14,128	460	10,995	277	113	13,828
Licking.....	29	2,778	9	8,190	1,190	66,774	726	6	128
Meigs.....	93	9,130	704	313,412	729	26,093	460	8	480
Monroe.....	23	3,103			1,020	37,573	885		
Morgan.....	32	4,090			221	11,094	175		
Muskingum.....	57	3,360	58	79,266	874	46,096	625	6	997
Noble.....			9	1,500	540	18,982	454		
Perry.....					567	30,372	484		191
Vinton.....	2	190			230	13,676	215		126
Washington.....	272	57,082	44	65,100	1,625	86,047	1,467	32	5,625
Totals.....	723	111,095	1,203	803,170	10,985	500,972	8,296	168	21,552

STATE TOTALS.				
5,995	954,527	3,918	2,299,657	145,692
			9,368,922	102,806
				361
				35,663

AGRICULTURAL STATISTICS—Continued.

Counties.	Onions.		Meadow.		Clover.			
	Acres planted 1911	Bushels produced 1911.	Acres in grass other than clover 1911.	Tons of hay produced 1911.	Acres grown in 1911.	Tons of hay produced 1911.	Bushels of seed produced 1911.	Acres plowed under for ma- ture 1911.
Athens.....	20	400	18,150	12,212	564	543	14	15
Belmont.....		84	28,674	8,010	4,379	3,529	19	5
Fairfield.....	1	150	36,168	28,864	12,350	9,989	2,701	203
Gallia.....			16,524	11,036	1,216	890	50	132
Guernsey.....	1	50	33,515	25,847	1,280	1,077	189	
Hocking.....			14,590	7,802	514	457	370	58
Jackson.....	1	359		15,129	10,976	774	545	24
Lawrence.....	9	537	6,812	3,025	391	218		23
Licking.....	6	2,200	53,070	44,341	9,359	9,701	453	92
Meigs.....		21	17,527	12,180	679	592	1	117
Monroe.....	1	313	24,462	14,882	788	599	64	4
Morgan.....			20,940	13,790	3,218	2,592	256	35
Muskingum.....	1	80	41,025	30,907	3,781	3,153	215	138
Noble.....			25,428	17,496	2,140	1,914	176	
Perry.....		3	22,197	16,787	4,979	4,737	1,928	28
Vinton.....			13,405	8,033	338	225	30	37
Washington.....	4	60	29,014	15,879	1,325	1,202	128	34
Totals.....	44	4,287	402,401	286,290	58,277	42,192	7,137	945

STATE TOTALS.			
5,750	1,548,370	2,087,798	1,884,287
		643,240	539,873
			124,757
			107,065

STATE TOTALS.

5,750	1,548,370	2,087,798	1,884,287	643,240	538,873	124,757	107,065
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AGRICULTURAL STATISTICS—Continued.

Counties.	Alfalfa.		Flax.			Tobacco.		Milk.
	Acres grown in 1911.	Tons of hay in 1911.	Acres sown 1911.	Bushels of seed 1911.	Pounds of fibre 1911.	Acres planted 1911.	Pounds produced 1911.	
Athens.....	848	1,687						105,495
Belmont.....	119	262				850	933,511	1,147,190
Fairfield.....	69	156				1	500	196,667
Gallia.....	55	97				1,716	1,539,862	23,635
Guernsey.....	69	109	3	27		147	162,640	226,596
Hocking.....	82	199						55,820
Jackson.....	43	17	38			8	11,675	74,127
Lawrence.....	2	3				360	307,580	168,710
Licking.....	149	362						811,780
Meigs.....	27	51				41	42,980	56,738
Monroe.....	13	15				1,163	1,493,045	32,722
Morgan.....	199	457						16,857
Muskingum.....	276	541				10	12,800	767,860
Noble.....	136	290	2	4		1,391	1,712,330	33,915
Perry.....	14	43						60,382
Vinton.....	4	4				5	1,890	8,280
Washington.....	215	531				11	12,466	296,420
Total.....	2,320	4,825	43	31		5,703	6,231,129	4,083,194

STATE TOTALS.				
25,159	54,513	1,477	10,836	529,891
			64,776	64,678,567
				69,351,938

STATE TOTALS.

25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	68,351,938
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AGRICULTURAL STATISTICS—Continued.

Counties.	Butter.		Cheese.		Eggs.		Sorghum.		
	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Number dozen produced 1911.	Number dozen shipped beyond state 1911.	Acres planted 1911.	Pounds of sugar 1911.	Gallons of syrup 1911.
Athens.....	380,785	62,428	400	9,832	694,798	12,460	3		211
Belmont.....	738,996	133,650	8,700		756,044	719	12	69	579
Fairfield.....	676,632	138,780	100		1,174,820	100	76		364
Gallia.....	474,581	200			791,448	225	16	1	3,425
Guernsey.....	534,525	21,342			695,557		5		1,575
Hocking.....	223,672				322,235		24		304
Jackson.....	284,843				414,594		157	803	1,522
Lawrence.....	283,465				277,272		9		8,197
Licking.....	830,268				1,350,182	51	12	61	372
Meigs.....	370,199	47,972	2,550	23,081	981,586	420	12	75	230
Monroe.....	540,733	10,200	271,370	261,850	920,238	69,120	151		1,360
Morgan.....	437,800	33,645			1,044,010	250	10		384
Muskingum.....	674,387	10,860			1,083,084		13		729
Noble.....	444,429	25,705	60		974,401	62,370	29	145	1,290
Perry.....	558,562	800			1,167,586	10,000	81	30	570
Vinton.....	232,870	77,915	600	1,100	373,961	1,525	9	45	446
Washington.....	679,533				1,076,871		21		1,637
Total	8,366,280	947,292	283,780	296,563	14,008,687	169,452	556	1,229	23,195

STATE TOTALS.

46,152,997	15,363,573	755,280	5,094,617	81,133,895	1,578,795	1,794	2,384	68,450
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AGRICULTURAL STATISTICS—Continued.

Counties.	Maple Products.			Honey.	Bees.	Commercial Fertilizers.		
	Number of trees from which sugar or syrup was made 1912.	Pounds of sugar 1912.	Gallons of syrup 1912.	Pounds of honey 1911.	Number of hives 1911.	Pounds used during 1911.	Cost of fertilizer used during 1911.	Estimated pounds to be used during 1912.
Athens.....	85	15	20	3,580	156	2,262,860	17,874	1,410,310
Belmont.....	1,322		296	2,504	178	2,297,005	25,267	1,453,835
Fairfield.....	2,597	199	1,108	931	139	7,056,545	79,637	6,810,635
Gallia.....	365	25	125	2,807	497	1,553,440	17,449	949,999
Guernsey.....	17	5		4,064	297	2,238,447	22,898	1,305,275
Hocking.....	250		128	610	20	2,670,670	28,522	2,080,500
Jackson.....				3,571	409	2,692,090	25,370	2,998,390
Lawrence.....	36	10	289	3,478	456	254,700	5,055	108,840
Licking.....	35,534		10,080	2,187	320	7,426,920	72,059	4,150,190
Meigs.....				1,536	141	2,030,075	26,159	1,344,100
Monroe.....	130	50	43	672	75	2,895,800	25,382	1,889,045
Morgan.....	175		25	1,972	112	3,142,964	34,003	1,749,175
Muskingum.....	1,296		692	5,523	365	4,312,380	50,774	3,082,620
Noble.....	30		20	2,487	206	1,525,470	15,817	976,390
Perry.....	10,335	190	4,103	2,830	242	5,873,510	57,808	5,056,425
Vinton.....				1,232	97	1,845,335	20,276	1,035,213
Washington.....				576	2,714	4,279,349	50,145	3,511,822
Totals	52,172	494	16,909	45,560	6,424	54,757,560	574,715	39,919,736

STATE TOTALS.				
	2,516,977	42,936	583,351	309,523
			26,287	320,152,047
				3,895,915
				221,897,745

AGRICULTURAL STATISTICS—Continued.

Counties.	Grapes and Wine.					Orchards.			
	Acres (new) vineyard 1911.	Whole number of acres in vineyard 1911.	Pounds of grapes gathered in 1911.	Gallons of wine pressed 1911.	Acres occupied 1911.	Bushels produced 1911.	Apples.		Peaches.
Acres occupied 1911.							Bushels produced 1911.		
Athens.....		1	200		4,320	119,103	532	595	
Belmont.....	1	39	68,575		4,622	160,731	231	369	
Fairfield.....		6	9,850		4,646	323,425	222	1,654	
Gallia.....	1		1,740		5,318	76,337	157	372	
Guernsey.....		1	1,000		4,107	203,974	180	743	
Hocking.....		1	500		1,766	144,164	139	349	
Jackson.....			300		2,384	113,905	144	913	
Lawrence.....	1		1,950		6,453	107,349	312	124	
Licking.....	4	4	365		3,629	186,131	198	3,120	
Meigs.....			1,700	620	3,644	56,191	161	190	
Monroe.....			31,350		3,836	163,071		212	
Morgan.....			820		2,862	88,660	148	887	
Muskingum.....		1	3,600		4,391	223,125	315	178	
Noble.....			500		3,708	157,275	40	922	
Perry.....					1,938	82,055	90	286	
Vinton.....			4,000		2,365	85,692	200	567	
Washington.....			1,200		9,394	338,876	116		
Totals.....	7	52	127,650	620	69,303	2,629,146	3,186	11,491	

STATE TOTALS.				
589	20,514	18,836,871	39,396	271,907
			12,746,045	19,566
				690,044

AGRICULTURAL STATISTICS—Continued.

Counties.	Orchards—Continued.							
	Pears.		Cherries.		Plums.		Other Small Fruits.	
	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.
Athens.....	65	385	15	203	25	230	14	310
Belmont.....	66	1,039	40	1,240	73	939	200	6,030
Fairfield.....	58	1,130	48	573	13	811	127	3,073
Gallia.....	48	227	15	188	6		135	2,216
Guernsey.....	42	775	22	49	27	686	129	1,170
Hocking.....	4	66	4	173	1	7	6	110
Jackson.....	6	100			3	50	3	120
Lawrence.....	44	25	25	186	18	138	219	2,663
Licking.....	44	743	68	670	13	470	94	3,687
Licking.....	24	321	9	111	12		57	1,300
Niegs.....	4	144	2	100	3	62	34	3,700
Monroe.....	4	234		131	4		1	
Morgan.....	66	1,720	12	219	21	228	75	2,040
Muskingum.....	2	2	4	192	9	175	54	115
Noble.....	24	821	2	299	2	346	11	527
Perry.....	11	42	2	280	2	39	8	135
Vinton.....	7	716	49	281	122	549	115	4,311
Washington.....	18							
Totals.....	542	8,519	317	4,845	361	5,595	1,234	58,507
STATE TOTALS.								
	5,134	245,566	2,368	113,538	1,895	58,329	5,080	261,464

AGRICULTURAL STATISTICS—Continued.

Counties.	Lands Owned in 1911.					Horses.		Cattle.			
	Number of acres cultivated.	Number of acres pasture.	Number of acres woodland.	Number of acres lying waste.	Total number of acres owned.	Number owned in April, 1912.	Beef cattle owned in April, 1912.	Milch cows owned in April, 1912.	All other cattle owned in April, 1912.	Total No. owned in April, 1912.	
Athens.....	28,555	140,573	28,573	21,237	218,938	4,317	1,149	4,257	3,637	9,043	
Belmont.....	87,267	133,624	22,255	16,655	262,673	6,338	366	9,016	6,071	15,355	
Fairfield.....	150,251	87,096	24,077	7,333	268,757	10,696	1,472	8,473	8,196	18,141	
Gallia.....	37,154	135,102½	22,942	20,760	233,913	4,869	289	4,753	5,072	10,022	
Guernsey.....	39,389	179,205	34,070	6,003	258,667	5,593	1,064	6,155	4,615	11,834	
Hocking.....	42,920	79,334	31,408	14,590	168,252	3,394	288	3,385	4,260	7,933	
Jackson.....	29,723	99,770	17,319	7,660	154,472	3,213	674	3,838	6,312	10,824	
Lawrence.....	30,867	65,629	17,842	43,143	157,481	2,983	301	3,575	3,738	7,614	
Licking.....	96,638	162,800	32,904	6,400	368,103	12,799	1,045	12,364	9,658	23,058	
Meigs.....	56,296	107,121	24,122	13,909	231,448	4,647	143	4,662	4,653	9,458	
Monroe.....	41,751	140,794	34,263	20,958	237,766	4,433	331	6,679	3,739	10,749	
Morgan.....	53,578	127,781	22,100	10,257	213,760	3,966	137	3,778	4,370	8,285	
Muskingum.....	115,128	189,365	37,298	9,781	351,572	7,244	620	9,004	8,252	17,837	
Noble.....	62,119	146,900	21,196	4,675	234,890	5,237	445	5,222	6,859	12,526	
Perry.....	58,783	95,867	21,120	17,505	193,275	6,205	457	5,676	6,063	12,196	
Vinton.....	22,780	80,326	41,902	18,755	163,763	2,540	76	2,455	2,912	5,477	
Washington.....	57,510	150,977	53,952	31,312	293,751	5,332	221	7,140	5,819	13,180	
Totals.	1,011,089	2,122,265	487,343	270,933	3,981,481	93,806	9,078	100,432	94,226	203,532	

STATE TOTALS.			
8,849,858	7,559,913	2,265,531	759,634
	19,640,316	659,402	44,020
	695,746	421,971	1,164,235

AGRICULTURAL STATISTICS—Continued.

Counties.	Sheep.				Hogs.		Wool.
	Number owned April 1912	Killed by dogs 1911.	Value 1911.	Injured by dogs 1911.	Value 1911.	Total number owned in April, 1912.	Pounds shorn 1911.
Athens.....	40,320	324	\$887	147	\$198	2,660	263,845
Belmont.....	56,094	839	3,511	252	545	6,276	387,092
Fairfield.....	13,558	148	581	37	137	31,021	58,538
Gallia.....	17,793	202	691	72	181	4,213	89,841
Guernsey.....	67,216	817	1,751	168	274	4,711	521,018
Hocking.....	12,923	159	480	71	182	4,547	70,462
Jackson.....	3,730	64	205	9	24	2,966	15,263
Lawrence.....	1,648	45	148	17	69	2,705	5,010
Licking.....	102,747	425	1,415	203	370	22,898	807,964
Meigs.....	21,275	225	752	99	449	2,935	181,576
Monroe.....	10,090	167	452	181	271	4,451	85,710
Morgan.....	67,230	273	1,193	76	119	3,121	555,052
Muskingum.....	93,527	650	2,052	293	427	7,528	717,349
Noble.....	52,985	405	1,196	125	167	4,585	318
Perry.....	23,879	322	1,038	72	172	8,159	204,593
Vinton.....	18,856	133	394	86	111	2,499	103,486
Washington.....	35,424	602	1,150	88	400	4,829	267,721
Totals.....	633,295	5,800	\$17,896	2,026	\$4,097	120,122	4,789,293

STATE TOTALS.				
2,098,213	17,630	\$67,959	7,134	\$16,613
1,401,223			38,952	15,711,368

AGRICULTURAL STATISTICS—Continued.

Counties.	Domestic Animals Died from Diseases in 1911.							
	Horses.		Cattle.		Sheep.		Hogs.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Athens.....	111	\$9,927	150	\$3,658	654	\$1,590	81	\$741
Belmont.....	179	16,730	182	5,331	850	1,401	462	2,991
Fairfield.....	248	22,284	216	5,494	447	1,573	1,068	6,650
Gallia.....	176	13,604	174	3,271	1,000	2,724	87	792
Guernsey.....	125	12,360	122	3,156	1,964	3,085	143	1,256
Hocking.....	124	9,655	162	3,234	648	1,470	196	1,461
Jackson.....	142	10,025	173	3,091	154	447	142	1,135
Lawrence.....	159	12,160	216	4,284	96	354	151	1,104
Licking.....	273	23,307	227	6,204	1,638	4,097	963	6,664
Meigs.....	243	12,970	146	2,821	385	1,020	51	479
Monroe.....	145	13,595	123	3,041	147	331	125	1,116
Morgan.....	192	13,105	101	2,648	808	1,582	54	595
Muskingum.....	222	10,394	73	2,295	817	1,580	267	1,701
Noble.....	131	12,845	148	3,568	1,206	2,532	94	849
Perry.....	101	9,020	128	2,745	372	532	127	1,227
Vinton.....	80	6,075	80	1,965	738	1,286	79	729
Washington.....	230	19,965	179	3,641	855	2,417	201	2,104
Totals.....	2,881	\$228,021	2,594	\$60,447	12,779	\$27,931	4,201	\$31,594

STATE TOTALS.			
21,328	\$1,647,595	16,226	\$451,991
		51,853	\$161,097
		212,584	\$1,332,212

AGRICULTURAL STATISTICS. NORTHWEST SECTION.

Counties.	Wheat.			Rye.			Buckwheat.	
	Acres sown for harvest 1911.	Bushels produced 1911.	Acres sown for harvest 1912.	Acres sown for 1911.	Bushels produced 1911.	Acres sown for 1912.	Acres sown for 1911.	Bushels produced 1911.
Allen.....	16,232	270,170	21,065	2,902	58,170	3,940		
Auglaize.....	27,526	422,072	28,056	1,408	19,375	2,984	5	83
Champaign.....	23,903	438,072	23,429	1,203	12,359	1,249	1	10
Chawford.....	28,005	286,945	21,592	1,773	1,654	325	30	528
Darke.....	41,210	713,881	38,999	1,985	31,504	3,263		
Defiance.....	24,138	460,370	20,127	332	4,349	740	9	64
Delaware.....	19,010	284,103	16,047	1,282	14,021	901		
Fulton.....	18,200	388,492	16,280	278	2,977	300	185	2,961
Hancock.....	33,080	537,297	29,393	1,350	18,556	1,714	12	198
Hardin.....	9,829	178,684	9,282	2,743	54,324	3,994	1	13
Henry.....	26,439	532,143	17,761	272	5,894	349	57	1,415
*Logan.....	9,958	234,380	9,399	810	12,234	658	207	4,512
Lucas.....	16,053	267,251	13,488	467	7,102	1,134		
Mercer.....	28,670	448,625	26,617	783	11,083	1,968	2	33
Morrow.....	19,235	212,075	14,016	383	4,834	1,201	6	104
Ottawa.....	13,031	236,341	10,555	235	4,125	227	2	80
Paulding.....	9,504	179,480	5,543	1,324	16,718	905	12	93
Putnam.....	25,399	421,154	22,043	1,267	25,751	1,176	3	55
Sandusky.....	37,905	750,546	33,937	1,85	3,622	464	33	528
Seneca.....	53,462	774,015	50,183	156	1,573	244	3	60
Shelby.....	25,066	36,503	24,095	577	6,213	1,027	1	10
Union.....	14,948	248,948	11,927	1,900	21,452	1,912		
Van Wert.....	11,985	195,749	9,704	1,480	21,812	2,234	35	204
Williams.....	23,137	366,458	18,156	203	3,186	232	54	586
Wood.....	26,183	511,434	14,774	461	6,181	452		
Wyandot.....	24,819	386,896	23,396	430	5,354	542		
Totals.....	607,497	9,784,539	529,868	23,826	374,724	34,135	662	11,453
STATE TOTALS.								
	1,973,742	30,047,056	1,766,042	58,166	716,600	85,624	10,937	113,273

*The auditor of Logan County failed to make out and forward his report to this office at time of going to press—July 26. The law requires that county auditors shall file their report with the Secretary of Agriculture not later than July 10. Totals for the State are complete with the exception of Logan County.

AGRICULTURAL STATISTICS—Continued.

Counties.	Oats.			Winter Barley.			Spring Barley.		
	Acres sown 1911.	Bushels produced 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres (estimated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres sown for 1912.
Allen.....	24,197	872,523	27,426	26	310	29	1,088	26,009	1,595
Auglaize.....	25,909	874,812	39,539	23	384	26	461	11,044	703
Champaign.....	24,676	713,177	31,665				15	122	62
Crawford.....	26,873	933,133	33,736	13	165		125	2,927	265
Darke.....	39,403	1,170,457	57,669			13	1,953	29,534	1,28
Defiance.....	34,277	1,434,836	41,332	16	470	22	1,020	30	1,413
Delaware.....	10,020	228,186	14,818	52		6	11	43,079	5
Fulton.....	26,663	1,029,544	33,191	9	212	46	1,389	12,866	2,192
Hancock.....	27,563	1,074,889	36,490	12	275	30	497	2,195	937
Hardin.....	21,366½	719,874	24,212	14	255	16	113	62,982	133
Henry.....	42,273	1,779,820	57,867	42	1,140	72	2,438		4,087
*Logan.....									
Lucas.....	19,578	790,963	23,452	35	1,200	48	1,373	42,800	2,836
Marion.....	24,169	889,543	33,967	10	188	29		23,261	1,327
Mercer.....	35,897	1,287,533	52,734	110	1,529	207	2,175	80	26
Morrow.....	12,197	352,451	17,878			6	8	52,058	2,631
Ottawa.....	18,030	668,869	23,748	9	233	6	1,844	5,899	501
Paulding.....	55,326	2,421,499	64,660	23	700	18	252	65,415	4,794
Putnam.....	34,694	1,361,590	48,831	77	1,500	114	2,574	9,895	1,346
Sandusky.....	34,526	1,230,928	52,066	30	1,037	151	401	2,227	194
Seneca.....	29,314	966,951	42,418	9	50	30	276	2,341	163
Shelby.....	36,247	1,334,780	48,618	50	2,420	37	112	125	27
Union.....	19,245	474,072	27,201	33	780	3	896	21,359	1,197
Van Wert.....	41,163	1,766,548	49,745	15	300	9	1,087	25,026	1,345
Williams.....	26,090	897,422	32,391	105	2,270	91	1,447	35,681	1,917
Wood.....	69,225	2,687,139	79,993	5	68	12	47	946	43
Wyandot.....	19,518	695,010	28,991						
Totals.....	781,436	28,662,549	1,023,738	718	15,486	1,021	19,776	479,855	29,867

STATE TOTALS.

1,431,120	47,837,403	1,835,024	2,347	60,415	3,768	21,197	507,407	32,646
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AGRICULTURAL STATISTICS—Continued.

Counties.	Corn.		Ensilage Corn.		Broom Corn.		Sugar Corn.		
	Acres planted 1911.	Bushels (shelled) produced 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Pounds broom brush produced 1911.	Ac es planted 1911.	Tons pro- duced 1911.
Allen.....	40,206	1,506,201	38,376	214	148			35	154
Auglaize.....	47,495	1,342,707	51,320	206	277		210	18	7
Champaign.....	58,755	2,161,509	58,767	83	115			510	1,206
Crawford.....	36,707	1,500,154	37,606	194	151			28	86
Darke.....	86,684	2,959,786	93,149	108	119	24	15,700	10	154
Defiance.....	35,446	1,479,529	34,542	205	114				
Delaware.....	37,772	1,417,493	41,815	1,535	1,298	19	2,600	22	23
Fulton.....	37,513	1,610,496	39,405	1,033	909	3	4	27	101
Hancock.....	56,469	2,342,167	57,972	130	72	10	6	251	2,677
Hardin.....	39,825	1,597,284	38,448	84	64	8	3,500	12	180
Henry.....	60,727	2,648,802	65,850	92	180			94	1,184
*Logan.....									
Lucas.....	27,893	1,162,237	29,094	1,421	1,495	5	1,000	179	708
Marion.....	48,712	2,101,888	51,754	340	53	1	100	132	355
Mercer.....	49,738	1,786,322	51,737	127	150	6	3,500	107	111
Morrow.....	27,056	1,033,422	26,906	372	422			52	123
Ottawa.....	25,452	1,145,659	25,097	48	48			2	2
Paulding.....	58,294	2,640,438	63,178	14	23	22	300	180	140
Putnam.....	60,304	2,012,909	59,322	11	17	1	18,630	216	579
Sandusky.....	52,950	1,986,358	53,155	165	84		990		
Seneca.....	52,156	1,910,133	54,111	69	28				
Shelby.....	48,780	1,677,630	51,596	10	45	5	3,000	3	47
Union.....	50,420	1,903,085	52,072	94	31	3	1,800	96	333
Van Wert.....	55,125	2,298,100	55,438	986	134			158	566
Williams.....	33,256	1,345,549	33,221	179	186	70	860		
Wood.....	91,808	3,698,774	96,785	385	1,387	1	780	54	113
Wyandot.....	39,899	1,698,560	41,164	47	25				
Totals.....	1,205,532	48,847,192	1,302,860	8,152	7,675	178	52,980	2,186	8,849

STATE TOTALS.

3,021,668	112,122,314	3,167,457	55,501	56,390	483	127,418	19,474	68,858
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STATE TOTALS.

3,021,668	112,122,314	3,167,457	55,501	56,390	483	127,418	19,474	68,858
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AGRICULTURAL STATISTICS—Continued.

Counties.	Tomatoes.		Peas.		Irish Potatoes.		Sweet Potatoes.	
	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Pounds produced 1911.	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Bushels produced 1911.
Allen.....	11	2,400	2	2,600	677	50,403		
Auglaize.....	4	550		500	901	67,539		554
Champaign.....	30	3,895	86	81,310	348	32,552		852
Crawford.....	5½	1,375	31	5,575	1,863	136,925		214
Darke.....	142	24,283			1,402	86,537	3	1,817
Defiance.....					818	50,733		1,128
Delaware.....	5½	255	70	3,500	482	32,080		655
Fulton.....	11	2,150	101	22,932	755	56,372		444
Hancock.....			2	2,500	868	68,884		565
Hardin.....	2		19	2,000	1,449	93,398		718
Henry.....					665	35,672	3	828½
*Logan.....								599
Lucas.....	780	164,670	19	9,886	3,328	279,069	6	2,994
Marion.....	4	900	51	22,900	741	51,640		1,030
Mercer.....	135	24,136	56	54,300	24,729	37,511		661
Morrow.....	2				877	96,929		541
Ottawa.....	406	101,705			810	49,179		749
Paulding.....	1	4,580			206	13,543		655
Putnam.....	1	100			819	50,385		228
Sandusky.....	4	1,100			2191	223,079	1	621
Seneca.....	3	1,880			2,191	187,202	38	2,102
Shelby.....	7	810			1,703	167,202	3	1,355
Union.....					772	55,715	1	796
Van Wert.....	13	3,470			182	9,597		152
Williams.....	60		34	14,400	1,014	53,395		952
Wood.....	138	31,761	5		647	40,889		356
Wyandot.....			14	370	1,266	119,493		838
Totals.....	1,726	369,060	462	222,773	50,004	2,003,501	55	446
								6,124

STATE TOTALS.

5,995	954,527	3,918	2,299,657	145,692	9,368,922	102,806	364	35,63
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AGRICULTURAL STATISTICS—Continued.

Counties.	Onions.		Meadow.		Clover.			
	Acres planted 1911	Bushels produced 1911.	Acres in grass (other than clover) 1911.	Tons of hay produced 1911.	Acres grown in 1911.	Tons of hay produced 1911.	Bushels of seed produced 1911.	Acres plowed under for mature 1911.
Allen.....	4	700	27,074	26,817	2,198	1,955	446	393
Anguize.....	24	5,320	17,816	15,735	6,838	5,957	1,644	646
Champaign.....	77	104	13,869	15,500	14,211	13,875	3,590	2,501
Crawford.....	2	400	28,198	26,345	11,790	9,822	1,725	27
Darke.....			17,246	16,918	26,012	21,482	4,208	12,421
Defiance.....			21,593	16,975	4,392	2,358	3,655	235
Delaware.....	1	107	41,899	44,188	8,995	9,926	603	86
Fulton.....	5	652	22,535	19,608	4,298	3,761	2,262	2
Harrook.....	22	5,820	30,970	28,307	5,006	4,115	1,778	888
Hardin.....	3,033	910,502	20,897	20,627	2,841	2,677	1,059	333
Henry.....			18,330	16,929	5,265	3,632	3,797	877
*Logan.....			11,381	11,255	4,031	3,919	2,293	279
Lucas.....	591	147,190	23,279	21,738	9,803	8,227	2,668	1,195
Marion.....	45	14,080	21,664	19,938	8,106	8,853	3,050	392
Mercer.....			28,812	26,694	12,370	13,223	647	40
Morrow.....	24	7,520	18,819	13,926	2,441	2,159	1,598	127
Ottawa.....			16,817	18,970	5,009	3,674	3,459	1,163
Paulding.....			22,080	21,275	4,902	3,071	3,699	1,799
Putnam.....	32		16,228	10,662	11,764	10,502	3,626	1,490
Sandusky.....	92	26,200	34,482	33,172	23,553	12,538	6,839	4,892
Seneca.....			12,830	10,480	13,421	8,726	2,050	4,542
Shelby.....			31,329	33,507	11,563	12,167	905	529
Union.....			27,819	28,394	6,203	5,108	2,383	365
Van Wert.....	17	2,991	30,396	24,911	6,479	4,723	2,533	12
Williams.....	9	1,847	21,373	21,373	10,691	8,425	11,168	3,435
Wood.....	66	8,300	29,929	22,374	9,381	7,771	1,521	509
Wyandot.....								
Totals.....	3,967	1,131,573	608,539	575,714	231,543	190,346	70,343	33,998

STATE TOTALS.

5.750	1,548,370	2,067,798	1,884,287	643,240	538,873	124,757	107,065
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AGRICULTURAL STATISTICS—Continued.

Counties.	Alfalfa.		Flax.		Tobacco.		Milk.
	Acres grown in 1911.	Tons of hay in 1911.	Acres sown 1911.	Bushels of seed 1911.	Acres planted 1911.	Pounds produced 1911.	
Allen.....	201	575					363,227
Auglaize.....	321	493			4	5,051	182,512
Champaign.....	1,185	2,980			56	54,700	684,605
Crawford.....	29	65					198,111
Darke.....	263	573					140,673
Defence.....	153	403			16,040	16,230,424	437,108
Delaware.....	139	1,276					632,581
Fulton.....	636	1,560	9	88			4,921,510
Hancock.....	331	161	10	91			136,980
Hardin.....	284	618	10	120			150,630
Henry.....	96	246					258,245
*Logan.....					1	200	1,509,004
Lucas.....	861	2,180	5	40			364,753
Marion.....	34	42					38,400
Mercer.....	300	655	25	100	32	22,130	90,220
Morrow.....	75	192					81,012
Ottawa.....	739	1,400					5,290
Paulding.....	64	111					15,831
Putnam.....	53	65	2	9			150,963
Sandusky.....	315	732					120,653
Seneca.....	296	590	1	15	205	133,650	229,350
Shelby.....	137	281				50	2,182,960
Union.....	683	1,483					48,155
Van Wert.....	73	125					748,345
Williams.....	237	545				719,517	447,010
Wood.....	680	1,438					51,525
Wyandot.....	122	243					
Totals.....	8,544	19,012	62	463	16,338	17,165,722	15,506,663

STATE TOTALS.

25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	69,351,938
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AGRICULTURAL STATISTICS—Continued.

Counties.	Butter.		Cheese.		Eggs.		Sorghum.	
	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Number dozen produced 1911.	Number dozen shipped beyond state 1911.	Acres planted 1911.	Pounds of sugar 1911.
Allen.....	632,959	101,265	12,050		1,057,720	300	6	561
Auglaize.....	512,356	22,230	2,500		977,456		78	5,226
Champaign.....	421,908	177,310	7,000		801,170	180	10	459
Crawford.....	512,580	3,855			1,117,923	900	2	70
Darke.....	993,827	289,046	110,000		2,139,802	55,567	31	1,810
Defiance.....	451,711	75,055			1,098,478		31	2,503
Delaware.....	484,628	1,509,836			1,160,637		11	97
Elmore.....	215,920	5,940,470	150,300	226,540	1,755,434	53,800	8	32
Franklin.....	975,191				1,260,702	300	3	183
Hardin.....	364,271	9,250	100		1,686,549	180	144	144
Henry.....	592,865	100,014			1,511,150	44,880	1	3,032
* Logan.....							8	
Lucas.....	269,749	162,883	1,490		599,077	6,930	1	13
Marion.....	350,256				753,059	1,240	3	163
Mercer.....	592,343	162			1,483,825	20,000	8	3,682
Morrow.....	377,680	171,680			1,165,191	7	3	132
Ottawa.....	375,320	43,550			887,789		2	706
Paulding.....	342,575	48,753	100	370	884,223	50	8	2,778
Putnam.....	410,496	83,419	6,100		1,324,083	11,460	19	21
Seneca.....	707,047	138,189	970		1,004,291		6	183
Shelby.....	516,752	29,229			1,015,490	83,570	65	1,964
Union.....	379,152	35,200			1,099,109		5	182
Van Wert.....	451,264	62,965			1,147,044		13	764
Williams.....	855,424				1,244,335	17,660	3	823
Wood.....	1,100,639	11,980		93,330	1,447,675	15,100	7	420
Wyandot.....	490,360		1,000		2,141,810		8	430
Totals.....	14,074,004	9,194,156	291,610	320,240	30,292,275	312,052	408	26,478

STATE TOTALS.

46,152,997	15,363,573	755,280	5,094,617	81,133,895	1,578,795	1,794	2,384	68,450
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AGRICULTURAL STATISTICS—Continued.

Counties.	Alfalfa.		Flax.		Tobacco.		Milk.	
	Acres grown in 1911.	Tons of hay in 1911.	Acres sown 1911.	Bushels of seed 1911.	Pounds of fibre 1911.	Acres planted 1911.		Pounds produced 1911.
Allen.....	291	575						363,227
Auklaize.....	321	493				4	5,051	162,512
Champaign.....	1,195	2,960				56	54,700	684,605
Crawford.....	29	65						198,111
Darke.....	263	573						1,400,673
Defiance.....	155	403				16,040	16,230,424	491,108
Delaware.....	459	1,276						632,581
Fulton.....	686	1,560	9	88				4,921,510
Hancock.....	131	161						159,990
Hardin.....	284	618	10	91				150,630
Henry.....	96	246	10	120				258,245
Logan.....								1,509,004
Lucas.....	861	2,180	5	40		1	200	364,753
Marion.....	34	42						38,400
Mercer.....	300	655	25	100		32	22,130	90,220
Morrow.....	75	192						81,012
Ottawa.....	739	1,400						5,290
Paulding.....	64	111						15,831
Putnam.....	53	65	2	9				150,963
Sandusky.....	315	732						120,653
Seneca.....	296	590	1	15		235	133,650	229,350
Shelby.....	137	281						2,182,960
Union.....	685	1,483						48,155
Van Wert.....	73	125						748,345
Williams.....	237	545			140		719,517	447,010
Wood.....	680	1,438						51,525
Wyandot.....	122	243						
Totals.....	8,544	19,012	62	463	140	16,338	17,165,722	15,506,663

STATE TOTALS.				
25,159	54,513	1,477	10,836	529,891
			64,776	64,678,567
				69,351,938

AGRICULTURAL STATISTICS—Continued.

Counties.	Butter.		Cheese.		Eggs.		Sorghum.		
	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Number dozen produced 1911.	Number dozen shipped beyond state 1911.	Acres planted 1911.	Pounds of sugar 1911.	Gallons of syrup 1911.
Allen	632,859	101,265	12,050		1,057,720	300	6		561
Auglaize	512,356	22,230	7,000		977,456		78		5,226
Champaign	421,006	177,310	2,500		801,170	180	10		459
Champaign	512,509	3,855			1,117,923	900	2		70
Darke	903,827	299,046	110,000		2,139,802	55,567	31	420	1,810
Defiance	451,711	73,055			1,098,478		31		2,503
Delaware	484,628	1,506,836			1,100,637		1		97
Fulton	215,920	5,940,470	150,300	226,540	1,765,434	53,800	8		32
Franklin	975,191				1,280,702	300	3		183
Franklin	304,271	9,250	100		1,686,549	180	4		144
Henry	562,865	100,014			1,511,160	44,860	8	48	3,032
Logan									
Lucas	269,749	162,883	1,490		599,077	6,930	1		13
Marion	350,256				753,059	1,240	3	7	163
Mercer	592,343	182			1,484,825	20,000	84	37	3,882
Morrow	477,680	171,680			1,165,191	7	3		100
Ottawa	375,420	4,550			1,187,796		2		132
Paulding	342,575	48,753	100		884,225		8		706
Putnam	410,496	85,419	6,100	370	1,324,083	50	19	79	2,778
Sandusky	766,531	138,189			1,004,291	11,460			21
Seneca	707,047	214,815	970		1,015,490		6		183
Shelby	516,752	29,229			1,099,109	83,570	65		1,964
Union	379,152	35,200			1,147,644		5		182
Van Wert	451,204	62,965			1,244,335		15	13	764
Williams	855,424	11,980		93,330	1,447,675	17,660	3		823
Wood	1,100,639				2,141,810	15,100	7		420
Wyandot	490,360		1,000		826,674		8		430
Totals	14,074,004	9,194,156	291,610	320,240	30,292,275	812,052	408	604	26,478

STATE TOTALS.

46,152,997	15,363,573	755,280	5,094,617	81,133,895	1,578,795	1,794	2,384	68,450
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AGRICULTURAL STATISTICS—Continued.

Counties.	Maple Products.			Honey.	Bees.	Commercial Fertilizers.		
	Number of trees from which sugar or syrup was made 1912.	Pounds of sugar 1912.	Gallons of syrup 1912.			Pounds used during 1911.	Cost of fertilizer used during 1911.	Estimated pounds to be used during 1912.
Allen	7,915	.....	1,044	2,937	217	1,376,925	\$15,555	789,250
Auglaize	11,776	.....	2,184	2,936	290	2,103,725	24,403	777,200
Champaign	10,611	600	3,032	4,409	308	3,537,735	32,840	1,426,250
Crawford	12,099	.....	2,027	915	198	3,340,180	34,682	2,136,920
Darke	3,530	.....	581	14,067	1,099	5,045,195	39,604	1,844,310
Defiance	8,184	.....	973	5,750	326	1,142,551	11,540	633,425
Delaware	19,961	24	3,021	2,320	242	2,720,785	28,048	1,566,590
Fulton	2,864	.....	263	50	8	2,232,225	178,647	609,975
Hancock	17,205	28	2,144	3,113	325	3,577,075	32,309	1,135,075
Hardin	1,066	.....	134	170	41	2,166,425	25,917	1,694,300
Henry	740	.....	179	5,360	459	1,194,175	13,510	672,410
*Logan	160	.....	3	23,104	319	1,731,710	19,450	1,378,765
Lucas	1,970	.....	409	856	218	1,850,650	19,239	576,800
Marion	490	.....	70	513	69	2,125,320	89,374	690,360
Mercer	74,051	484	14,290	722	243	4,008,095	35,879	2,843,250
Morrow	40	.....	12	1,975	109	138,800	1,269	79,300
Ottawa	150	10	20	2,578	228	263,000	1,614	39,810
Paulding	520	.....	98	4,265	400	503,879	6,047	243,700
Putnam	1,150	.....	372	1,439	208	4,509,400	47,092	1,621,250
Seneca	24,424	2	2,784	4,394	328	7,898,720	73,129	5,227,135
Shelby	2,367	153	463	1,848	127	2,442,050	21,410	899,050
Union	16,565	644	2,990	3,720	309	1,810,350	18,420	815,180
Van Wert	162	.....	25	12,082	488	143,250	1,681	140,350
Williams	19,326	355	2,625	925	256	2,317,000	45,241	326,000
Wood	2,310	.....	362	1,427	227	1,630,450	17,549	748,925
Wyandot	7,242	.....	1,010	1,740	127	2,939,700	24,802	1,561,800
Totals	246,828	2,300	41,185	103,605	7,129	62,740,270	\$862,351	30,446,680

STATE TOTALS.

2,516,977	42,936	583,351	309,523	26,287	320,152,047	\$3,895,915	221,897,745
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AGRICULTURAL STATISTICS—Continued.

Counties.	Grapes and Wine.				Orchards.		
	Acres (new) vineyard 1911.	Whole num-ber of acres in vineyard 1911.	Pounds of grapes gath-ered in 1911.	Gallons of wine pressed 1911.	Apples.	Peaches.	
					Acres occu-pied 1911.	Bushels pro-duced 1911.	
Allen	1		2,800		2,079	116,863	
Auglaize		1	15,400		1,484	130,409	
Champaign					1,455	203,404	
Crawford		3	19,598	20	22,766	152,331	
Darke	4	42	5,970	50	3,651	318,062	
Defiance		2	18,770		1,976	64,921	
Delaware	2	200			2,162	161,581	
Fulton	2		3,500		2,563	81,483	
Hancock			14,705		3,499	140,843	
Hardin	1				1,460	76,921	
Henry	31	1	1,002		3,088	75,188	
Logan							
Lucas	31	290	818,699	13,242	2,133	70,923	
Marion		200	200	10	1,704	84,291	
Mercer	5	8	26,900		2,120	133,031	
Morrow					1,926	90,628	
Ottawa	12	1,563	4,952,189		2,140	77,497	
Paulding	1	5	10,320	290	1,528	56,609	
Pendleton	5	4	11,639		2,548	118,252	
Sandusky	1	3	7,280		2,618	143,995	
Seneca			3,230		3,203	94,494	
Shelby					2,144	176,078	
Union			3,000		1,989	183,374	
Van Wert	1		17,810		2,771	113,094	
Williams		1			3,502	120,284	
Wood	22	51	132,051	20	3,313	80,794	
Wyandot			350		1,668	59,244	
Totals	118	2,173	6,065,413	13,632	81,083	3,024,594	
						528,902	
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STATE TOTALS.

589	20,514	18,836,871	39,396	271,907	12,746,045	19,566	690,044
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AGRICULTURAL STATISTICS—Continued.

Orchards—Concluded.

Counties.	Pears.		Cherries.		Plums.		Other Small Fruits.	
	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.
Allen	10	1,006	15	1,233	8	763	12	798
Anguize	10	3,470	51	804	19	1,505	25	497
Champaign	8	2,220	9	1,444	7	993	20	1,570
Crawford	42½	1,196	6	1,612	3	365	20	4,219
Darke	21	1,878	64	2,791	7	1,195	57	2,192
Defiance	26½	2,067	4	401	2½	204	4	300
Delaware	18	444	15½	475	4	197	25	25
Fulton	6	1,369	15	566	4	401	24	190
Hancock	1½	415	8	2,182	1	170	5	906
Hardin	5	209	4	618	1	176	7½	261
Henry	5	209	1	299	4	176	16	1,250
*Logan	121	8,032	99	7,187	22	1,311	41½	21,281
Lucas	44	1,206	14	830	8	224	41	2,102
Marion	2	733	5	251	11	505	6	104
Mercer	3	312	12	316	6	132	0	580
Morrow	122	20,008	41	1,896	142	10,331	38	1,159
Ottawa	8	620	3	87	2	58	2	100
Paulding	13	669	11	913	12	465	1	63
Putnam	27	3,365	156	8,652	5	324	11	540
Sandusky	5	197	17	295	8	15	9	376
Seneca	25	6,660	7	954	3½	1,683	28	717
Shelby	14	2,852	1	206	8	178	6	247
Union	6	637	20	876	3½	435	4	133
Van Wert	204	1,037	2	565	3	161	8	323
Williams	13	1,156	41	1,899	9	146	18	415
Wood	1	561	5½	844	7	303	145	905
Wyandot	757	62,319	633	38,266	299	22,240	927	41,253
Totals								

STATE TOTALS.

5,134	245,566	2,368	113,538	1,895	58,329	5,089	261,464
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AGRICULTURAL STATISTICS—Continued.

Counties.	Lands Owned in 1911.				Horses.		Cattle.			
	Number of acres cultivated.	Number of acres pasture.	Number of acres woodland.	Number of acres lying waste.	Total number of acres owned.	Number owned in April, 1912.	Beef cattle owned in April, 1912.	Milch cows owned in April, 1912.	Total No. owned April, 1912.	All other cattle owned April, 1912.
Allen	94,357	74,900	23,924	2,577	195,758	7,529	291	7,362	3,674	11,327
Auglaize	118,192	50,802	25,530	2,501	197,025	7,624	393	7,703	5,211	13,307
Champaign	166,075	55,826	17,750	1,587	221,838	10,488	1,160	7,439	5,919	14,518
Crawford	121,736	74,218	28,008	1,037	224,909	8,005	283	7,650	5,026	12,959
Darko	265,026	40,502	33,935	7,227	346,710	16,946	425	14,214	8,463	23,102
Defiance	125,586	30,844	29,748	4,355	199,688	7,808	240	6,574	3,029	9,843
Delaware	73,383	144,888	17,493	2,102	237,846	8,764	261	9,972	5,663	15,803
Fulton	114,744	64,189	21,307	4,008	204,248	7,167	547	11,187	2,968	14,702
Harcock	174,544	56,164	26,887	2,119	259,693	9,102	280	9,563	6,764	16,607
Hardin	90,034	60,107	16,997	1,448	169,818	7,236	476	4,091	3,452	10,508
Henry	154,296	42,410	23,101	3,646	222,862	8,334	412	8,222	2,889	11,523
Logan	78,867	24,558	7,779	9,145	120,349	5,485	304	7,013	1,580	8,977
Lucas	90,370	83,611	13,018	1,389	189,247	7,476	576	4,951	5,206	10,733
Marion	164,110	39,443	31,716	5,917	240,886	10,618	125	8,514	7,511	16,328
Meeker	110,157	73,235	24,448	1,529	211,368	6,893	234	6,524	4,189	10,868
Morrow	70,918	28,556	16,766	5,754	112,006	5,444	132	5,337	2,022	7,491
Ottawa	133,042	46,758	16,779	3,827	199,705	9,223	73	5,358	2,329	7,760
Paulding	120,854	53,810	24,651	3,887	230,402	8,639	298	8,734	3,585	12,617
Putnam	120,392	50,420	17,269	6,014	194,075	8,093	250	8,955	3,768	12,973
Sandusky	164,981	97,797	31,863	5,510	292,871	10,172	136	9,772	4,066	15,205
Seneca	140,208	45,744	20,315	5,937	215,224	8,502	155	8,513	4,856	13,504
Shelby	136,529	85,437	18,694	1,168	271,788	9,355	176	8,510	5,362	14,147
Union	137,067	67,771	24,184	803	229,525	9,179	194	6,707	3,182	10,065
Van Wert	103,096	77,463	23,668	3,239	213,366	8,933	194	7,790	4,707	12,612
Williams	210,685	65,510	22,928	6,094	305,217	14,507	2,847	11,655	5,052	19,556
Wood	89,756	84,510	23,206	2,533	200,006	7,196	465	5,457	3,456	9,378
Wyandot	78,867	24,558	7,779	9,145	120,349	5,485	304	7,013	1,580	8,977
Totals	3,346,415	1,621,176	579,464	96,972	5,714,031	228,376	11,380	202,547	113,769	337,515

STATE TOTALS.

8,849,838	7,559,913	2,265,511	759,634	19,040,316	659,402	44,020	605,746	421,971	1,164,235
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AGRICULTURAL STATISTICS—Continued.

Counties.	Sheep.				Hogs.		Wool.	
	Number owned in April, 1912.	Killed by dogs 1911.	Value 1911.	Injured by dogs 1911.	Value 1911.	Total number owned in April, 1912.	For summer markets, 1912.	Pounds shorn, 1911.
Allen.....	10,116	50	\$270	3	\$8	25,144	6,955	105,056
Anguize.....	7,502	75	380	59	213	22,475	7,177	143,029
Champaign.....	24,883	104	329	198	187	36,997	12,586	157,051
Crawford.....	43,015	98	381	21	24	23,386	9,201	351,602
Darke.....	5,698	73	536	101	258	38,087	9,431	32,569
De-fance.....	13,340	159	845	40	211	15,229	4,119	83,183
Delaware.....	42,990	247	917	255	269	18,885	7,125	335,379
Fulton.....	8,357	95	1,196	40	121	15,416	4,957	40,303
Hancock.....	31,176	152	498	116	397	39,601	13,941	226,218
Hardin.....	31,049	145	706	54	168	20,911	6,332	199,609
Henry.....	5,498					13,164	3,704	31,370
Logan.....								
Lucas.....	1,449	56	264	49	177	9,945	4,592	8,966
Marion.....	42,555	148	616	110	486	31,227	7,977	360,560
Mercer.....	9,355	169	887	63	197	33,374	61,952	574,802
Morrow.....	63,230	118	244	56	86	12,489	4,878	57,707
Ottawa.....	3,911	21	93	10	45	7,350	2,216	31,707
Paulding.....	8,833	236	1,308	54	153	12,778	3,010	53,860
Putnam.....	10,054	168	525	38	53	28,391	10,824	72,771
Sandusky.....	13,163	104	537	38	157	28,175	4,282	84,843
Seneca.....	32,659	263	971	86	219	29,083	9,496	274,251
Shelby.....	5,120	13	58	4	2	18,231	3,286	28,934
Union.....	43,727	115	475	124	171	32,133	10,004	311,979
Van Wert.....	10,445	67	331	14	56	21,608	6,551	68,627
Williams.....	19,214	193	703	90	223	20,570	7,955	127,225
Wood.....	13,172	135	639	54	167	34,250	12,596	82,734
Wyandot.....	65,593	157	864	58	159	26,060	8,761	414,794
Totals.....	572,006	3,101	\$14,552	1,735	\$1,207	618,559	187,567	4,166,374

STATE TOTALS.

2,098,213	17,630	\$67,959	7,134	\$16,013	1,401,223	398,952	15,711,308
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STATE TOTALS.

2,098,213	17,630	\$67,959	7,134	\$16,013	1,401,223	398,952	15,711,368
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AGRICULTURAL STATISTICS—Continued.

Counties.	Domestic Animals Died from Diseases in 1911.					
	Horses.		Cattle.		Sheep.	
	Number.	Value.	Number.	Value.	Number.	Value.
Allen	137	\$17,005	147	\$4,834	843	\$3,270
Auglaize	2,851	17,882	201	6,334	366	2,344
Champaign	210	22,595	208	6,510	1,050	3,157
Crawford	222	14,766	147	9,917	939	2,776
Darke	414	39,815	420	11,512	395	1,959
Defiance	124	12,930	116	3,710	438	1,707
Delaware	167	16,955	190	3,000	270	2,537
Fulton	181	21,062	214	7,966	436	1,032
Hancock	260	27,111	235	5,298	1,314	1,050
Hardin	162	17,185	136	3,813	1,142	5,838
Henry	214	26,423	231	6,948	337	1,345
*Logan						17,402
Lucas	312	24,280	216	6,870	35	1,143
Marion	201	21,525	264	5,102	1,337	3,720
Mercer	230	25,940	276	6,816	573	2,074
Morrow	120	14,530	94	2,566	495	2,138
Ottawa	130	15,730	87	2,338	167	1,265
Paulding	347	38,610	225	5,306	146	618
Putnam	260	30,084	255	7,368	763	2,752
Sandusky	582	19,097	140	4,856	468	2,170
Serra	246	31,665	226	6,655	476	11,635
Shelby	243	25,780	295	7,273	3,858	3,896
Union	185	20,120	163	5,286	890	6,203
Van Wert	259	32,320	165	5,093	920	6,812
Williams	163	19,532	145	3,360	4,955	27,158
Wood	384	40,665	266	8,102	4,451	32,491
Wyandot	190	20,981	110	3,545	416	3,334
Totals	8,827	\$614,638	5,202	\$145,116	24,911	\$68,045
					49,352	\$305,921

STATE TOTALS.

	213,328	\$1,647,595	16,226	\$151,991	51,858	\$161,097	212,584	\$1,332,212
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AGRICULTURAL STATISTICS. SOUTHWEST SECTION.

Counties.	Wheat.			Rye.			Buckwheat.	
	Acres sown for harvest 1911.	Bushels produced 1911.	Acres sown for harvest 1912.	Acres sown for 1911.	Bushels produced 1911.	Acres sown for 1912.	Acres sown for 1911.	Bushels produced 1911.
Adams.....	13,158	118,537	13,432	950	5,988	1,822	1	5
Brown.....	17,108	176,246	13,535	3,693	18,648	4,463	1	4
Butler.....	49,281	773,734	45,549	756	7,238	940		
Clark.....	27,702	478,102	24,949	1,906	27,164	2,574	3	
Clinton.....	14,110	156,431	9,982	1,975	14,848	2,008	2	25
Clement.....	36,501	634,747	32,975	2,067	17,952	2,815	1	29
Fayette.....	34,244	636,455	33,393	666	7,109	1,125		
Franklin.....	36,391	720,262	33,393	918	10,335	814	7	29
Greene.....	38,239	647,392	25,770	1,823	24,097	2,436	6	130
Hamilton.....	14,884	265,410	34,441	613	6,846	449	4	24
Highland.....	37,304	442,172	11,799	1,368	9,817	2,546		
Madison.....	25,620	430,771	19,839	457	5,869	932	5	84
Miami.....	30,913	593,771	31,211	314	4,713	768		
Montgomery.....	34,072	640,063	25,018	993	13,880	1,473	100	10
Packaway.....	63,949	1,218,940	59,905	215	798	482	300	2,953
Pike.....	14,205	166,584	14,503	115	755	228		
Preble.....	45,674	797,148	41,384	790	9,070	1,562		
Ross.....	49,364	677,927	49,068	993	7,100	2,007	96	1,456
Schofield.....	13,204	174,258	13,857	77	130	218	727	12,244
Warren.....	26,229	422,901	22,621	2,111	19,934	1,826		
Totals.....	622,152	10,190,923	557,594	23,000	212,400	31,488	1,253	16,964

STATE TOTALS.				
1,973,742	30,047,056	1,766,042	58,166	716,600
			85,624	10,937
				193,273

AGRICULTURAL STATISTICS—Continued.

Counties.	Oats.		Winter Barley.			Spring Barley.			
	Acres sown 1911.	Bushels produced 1911.	Acres (esti- mated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres (esti- mated) sown for 1912.	Acres sown 1911.	Bushels produced 1911.	Acres sown for 1912.
Adams.....	3,444	29,718	4,091	7	100	14			19
Brown.....	4,046	26,372	5,710						294
Butler.....	6,400	102,882	13,964	314	8,970	721	36	340	20
Clark.....	9,778	211,165	15,545	361	12,000	385	46	530	3
Clemont.....	6,254	50,154	6,998			4	12	238	20
Clinton.....	3,673	59,347	10,164				47	550	18
Payette.....	2,061	51,151	8,759	20	800	50	6	50	4
Franklin.....	7,351	146,263	17,604			483			
Greene.....	6,806	122,226	1,460	38	1,060	138	125	1,460	91
Hamilton.....	2,596	46,582	3,201	33	670	61	38	857	298
Highland.....	3,070	37,365	3,826	33	1,100	33			23
Madison.....	21,572	526,584	29,029	75	800	104	51	600	87
Miami.....	26,133	765,228	40,603	45			18	500	35
Montgomery.....	10,339	202,776	22,897	5		39	42	293	110
Pickaway.....	658	13,286	6,468	71	2,088				
Pike.....	2,722	33,601	3,246						
Preble.....	8,445	191,241	25,692	10	200		34	250	24
Ross.....	1,861	28,629	2,835	14	260				68
Scioto.....	3,441	38,332	2,606	11	140	7			
Warren.....	9,014	148,729	12,842	49	620	92	50	1,130	152
Totals.....	138,664	2,831,631	237,240	1,053	28,808	2,143	545	6,796	1,266

STATE TOTALS.								
1,431,120	47,637,403	1,835,024	2,347	60,415	3,768	21,197	507,407	32,646

STATE TOTALS.

	1,431,120	47,837,403	1,835,024	2,347	60,415	3,768	21,197	507,407	32,646
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AGRICULTURAL STATISTICS—Continued.

Counties.	Corn.		Ensilage Corn.		Broom Corn.		Sugar Corn.		
	Acres planted 1911.	Bushels (shelled) produced 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Acres planted (estimated) for crop of 1912.	Acres planted 1911.	Pounds broom brush produced 1911.	Acres planted 1911.	Tons produced 1911.
Adams.....	35,187	639,405	36,845	75	1	1	250	1	.....
Brown.....	43,650	1,010,968	45,024	103	65	12	3,900	263	585
Butler.....	52,326	2,146,137	58,735	579	125	5	2,700	67	165
Clark.....	47,665	1,814,192	59,063	1,078	566	.....	150	281	414
Clermont.....	42,111	1,061,855	39,457	.....	1,043	9	3,350	1,081	2,649
Clinton.....	66,058	2,600,235	65,752	40	79	.....	.....	626	1,216
Fayette.....	49,104	1,913,377	54,690	67	75	15	820	513	1,105
Franklin.....	53,948	2,021,515	60,990	2,063	1,708	11	500	504	881
Greene.....	50,331	2,319,043	62,152	201	294	4	3,967	1,285	2,378
Hamilton.....	20,224	803,626	274	274	271	45	.....	72	116
Highland.....	1,835,304	58,934	100	100	106	.....	.....	781	1,616
Madison.....	57,910	2,927,330	76,426	15	15	10	5,000	114	50
Miami.....	60,747	2,027,867	58,425	163	160	20	12,006	262	704
Montgomery.....	53,044	1,416,853	49,903	353	372	.....	.....	4,579	13,898
Pickaway.....	71,882	3,228,892	80,354	55	55	3	1,850	3	5
Pike.....	27,873	682,860	24,578	46	46	4	2,250	16	301
Preble.....	60,788	2,397,950	69,797	214	57	23	3,885	1,626	4,472
Ross.....	67,717	2,431,903	66,540	74	101	17	3,902	58	62
S. ioto.....	22,729	614,118	23,647	246	258	15	8,400	3,314	8,930
Warren.....	48,315	1,915,306	50,997	.....	.....	.....	.....	.....	.....
Totals.....	994,523	35,838,786	1,065,662	5,755	5,297	190	52,830	15,446	39,576

STATE TOTALS.

3,021,668	112,122,314	3,167,457	55,501	56,390	483	127,418	19,474	68,858
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AGRICULTURAL STATISTICS—Continued.

Counties.	Tomatoes.		Peas.		Irish Potatoes.			Sweet Potatoes.	
	Acres planted 1911.	Bushels produced 1911.	Acres planted 1911.	Pounds produced 1911.	Acres planted 1911.	Bushels produced 1911.	Acres (estimated) for crop of 1912.	Acres planted 1911.	Bushels produced 1911.
Adams.....	3	310			241	7,491	152	5	190
Brown.....	54	7,210	13	12,000	277	12,688	216	15	214
Butler.....	108	13,408	1	500	1,129	58,947	1,033	2	90
Clark.....	41	6,323	2	145	845	62,691	721	2	287
Clermont.....	669	1,539	6	2,150	992	40,317	863	13	828
Clinton.....	6	2,002	1	1,600	90	7,389	65		194
Fayette.....		45	47	51,850	104	796	94		
Franklin.....	183	33,019	105	138,165	1,754	113,799	1,457	4	20
Greene.....	11	1,536			1,027	60,340	599		
Hamilton.....	1,198	135,305	23	3,328	4,610	303,705	3,987	35	3,357
Highland.....	37	3,200	1		57	3,289	34	2	45
Madison.....	11	800			133	28,475	104		
Miami.....	16	1,288			1,294	116,647	1,105	14	77
Montgomery.....	102	13,020	8	630	1,261	32,040	580	1	20
Pickaway.....	84	7,335	557	492,830	116	10,067	92		
Pike.....	5	1,230			525	20,849	419		
Preble.....	37	4,663	1	400	320	16,196	269	19	1,128
Ross.....	20	7,630	547	495,264	829	45,576	594		
Scioto.....	131	2,692	13	7,090	1,288	77,814	1,159	32	435
Warren.....	199	7,975	6		359	16,631	302	3	139
Totals.....	2,915	350,530	1,331	1,195,952	16,257	1,047,747	13,780	134	7,024

STATE TOTALS.

5,995	954,527	3,918	2,299,657	145,692	9,368,922	102,806	364	35,663
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AGRICULTURAL STATISTICS—Continued.

Counties.	Onions.		Meadow.		Clover.			
	Acres planted 1911	Bushels produced 1911	Acres in grass (other than clover) 1911	Tons of hay produced 1911	Acres grown in 1911	Tons of hay produced 1911	Bushels of seed produced 1911	Acres plowed under for manure 1911
Adams.....			14,782	7,731	5,183	2,746	870	125
Brown.....		25	18,039	10,262	2,650	1,145	271	271
Butler.....	6	1,025	13,985	12,451	14,935	7,725	2,166	3,727
Clark.....	3	47	16,989	18,134	10,318	10,812	1,556	904
Clermont.....	7	182	26,161	17,859	2,311	1,900	94	227
Clinton.....		25	12,500	12,157	6,017	4,840	2,624	5,106
Fayette.....		17	6,936	6,793	7,086	4,614	1,653	2,152
Franklin.....	1	358	33,279	29,098	7,249	6,898	1,290	2,486
Greene.....			13,280	13,129	10,617	9,242	2,077	3,222
Hamilton.....			12,879	12,632	3,359	3,241	461	659
Highland.....	48	5,897	17,956	13,751	9,006	5,733	4,966	271
Madison.....			17,000	15,888	12,212	9,543	3,541	2,879
Miami.....	112	75	13,262	12,738	13,563	10,669	1,665	4,935
Montgomery.....	2	750	18,618	8,288	11,770	7,097	3,464	4,402
Pike.....	4	314	17,141	9,080	11,770	7,770	2,193	2,745
Pickaway.....	1	150	7,715	5,153	4,026	1,997	809	1,520
Preble.....	5	500	11,109	7,443	23,375	12,451	4,239	20,299
Ross.....	1	30	18,170	8,952	15,693	4,909	1,806	8,018
Schoon.....	62	7,353	12,542	6,982	1,407	837	69	659
Scioto.....	68	411	19,141	15,147	6,099	3,733	379	3,843
Warren.....		8						
Totals.....	320	17,167	321,524	244,268	175,909	117,922	36,002	68,010

STATE TOTALS.				
5,750	1,548,370	2,087,798	1,884,287	107,065

AGRICULTURAL STATISTICS—Continued.

Counties.	Alfalfa.		Flax.		Tobacco.		Milk.	
	Acres grown in 1911.	Tons of hay in 1911.	Acres sown 1911.	Bushels of seed 1911.	Pounds of fibre 1911.	Acres planted 1911.		Pounds pro-duced 1911.
Adams.....	157	167				2,924	2,862,240	131,575
Brown.....	104	174				4,169	4,204,168	119,022
Butler.....	1,089	2,334	24	61		867	779,064	1,157,971
Clark.....	524	1,078				151	125,582	981,858
Clermont.....	974	1,677				2,085	1,980,455	1,384,769
Clinton.....	272	569	5	53			46	13,907
Payette.....	226	594						49,300
Franklin.....	512	1,211					724	2,192,305
Greene.....	940	2,393				280	199,950	625,970
Hamilton.....	2,024	4,460			5	378	398,260	1,671,347
Highland.....	406	1,099				61	62,115	109,020
Hudson.....	395	1,002						122,250
Madison.....	290	613	9			6,228	6,051,235	332,842
Miami.....	1,491	2,838				14,532	13,910,175	1,742,352
Montgomery.....	213	615						162,210
Pickaway.....	117	436				93	80,160	2,625
Pike.....	733	1,207				6,907	6,866,610	395,675
Preble.....	835	1,712				11	8,900	193,578
Ross.....	298	477	2	17		450	380,079	183,265
Scioto.....	766	1,572				3,444	2,649,640	1,564,775
Warren.....								
Totals.....	12,426	26,228	40	181	5	42,560	41,018,408	13,127,439
STATE TOTALS.								
	25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	69,351,938

STATE TOTALS.

25,159	54,513	1,477	10,836	529,891	64,776	64,678,567	68,351,938
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AGRICULTURAL STATISTICS—Continued.

Counties.	Butter.		Cheese.		Eggs.		Sorghum.		Gallons of syrup 1911.
	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Pounds made in home dairies 1911.	Pounds made in factories and creameries 1911.	Number dozen produced 1911.	Number dozen shipped beyond state 1911.	Acres planted 1911.	Pounds of sugar 1911.	
Adams.....	412,950	20,745	400		919,280	65,814	29		1,030
Brown.....	568,172	74,934			1,235,510	75	8	50	511
Butler.....	656,757	36,000	9,200		770,198	1,560	10	300	286
Clark.....	452,826	9,740	3,000		555,008		17		1,061
Clermont.....	806,430	1,320	1,320	83,130	1,111,162	100	16		1,005
Clinton.....	363,766	88,765	39	650	849,224		6		798
Fayette.....	142,380				378,549				
Franklin.....	752,447	267,225	700	700	876,760		5		175
Greene.....	400,359	65,328	70		606,275	701,032	5		357
Hamilton.....	576,149	16,800	2,369		1,073,965	4,565	14	50	297
Highland.....	587,095	58,078	2,500		634,263				
Madison.....	256,928	23,982			699,674	63,338	7		583
Miami.....	798,351	26,620	450		917,198		13		697
Montgomery.....	1,163,875	22,640	13,070		778,809				
Pickaway.....	435,080	6,280			448,352	328	31		2,300
Pike.....	192,025	1,350			1,015,880	3,900	18		1,515
Preble.....	645,129	156,155	37,700		721,233		20		921
Ross.....	392,449	7,705			449,770		87	85	4,190
Scioto.....	340,060		1,800		693,195	40			
Warren.....	464,936	157,270	3,250	5,800					
Totals.....	10,363,184	1,039,615	75,859	90,280	14,862,225	840,740	287	485	15,726

STATE TOTALS.				
46,162,997	15,363,573	755,280	5,094,617	81,123,895
			1,794	2,384
				68,450

AGRICULTURAL STATISTICS—Continued.

Counties.	Maple Products.			Honey.	Bees.	Commercial Fertilizers.		
	No. of trees from which sugar or syrup was made 1912.	Pounds of sugar 1912.	Gallons of syrup 1912.			Pounds used during 1911.	Cost of fertilizer used during 1911.	Estimated pounds to be used during 1912.
Adams.....	2,643	25	977	4,042	528	4,663,140	\$51,890	3,802,900
Brown.....	72		20	6,194	507	3,282,760	43,022	2,075,955
Butler.....	1,025		246	1,188	123	2,020,434	25,746	960,925
Clark.....	275		78	11,030	593	2,534,633	134,057	1,160,729
Clem.....	510		265	3,610	230	3,048,350	32,373	2,098,895
Clinton.....	23,688		9,136	1,647	161	6,372,950	63,878	4,033,400
Rayette.....				1,835	95	5,171,100	43,792	3,155,220
Franklin.....	274		102	2,910	273	4,260,325	43,257	3,261,080
Greene.....	15,701		5,586	3,602	475	4,287,207	58,390	2,037,300
Hamilton.....	300		90	4,537	270	7,642,925	89,932	3,364,375
Highland.....	4,272		1,743	3,499	291	7,862,458	82,496	6,216,235
Madison.....				2,389	216	3,136,195	30,629	1,029,400
Montgomery.....	5,127	42	1,007	2,898	265	3,088,035	38,016	2,137,255
Pickaway.....	4,346	226	1,392	4,696	384	5,081,910	52,772	3,386,260
Pike.....	446	75	240	5,707	48	8,047,085	68,132	5,661,700
Dike.....	40		35	1,735	161	3,457,400	35,307	2,736,125
Preble.....	2,403		583	13,617	726	8,657,470	82,703	4,524,980
Ross.....	3,603		1,938	3,050	529	6,272,565	76,525	3,853,594
Scioto.....	6			7,615	903	2,761,040	30,470	2,993,207
Warren.....	4,063	2	1,939	129	715	3,127,600	33,130	1,677,950
Totals.....	69,395	370	25,289	82,172	7,202	89,139,812	\$1,029,595	59,369,785

STATE TOTALS.

2,516,977	42,936	583,351	309,523	26,287	320,152,047	\$3,895,915	221,897,745
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AGRICULTURAL STATISTICS—Continued.

Counties.	Grapes and Wine.				Orchards.			
	Acres (new) vineyard 1911.	Whole num-ber of acres in vineyard 1911.	Pounds of grapes gathered in 1911.	Gallons of wine pressed 1911.	Apples.		Peaches.	
					Acres occu-pied 1911.	Bushels pro-duced 1911.	Acres occu-pied 1911.	Bushels pro-duced 1911.
Adams.....			250		1,834	100,376	99	963
Brown.....		2	5,350		1,650	97,148	12	709
Butler.....		3	2,200	25	714	39,110	38	443
Clark.....		1	32,700	56	1,583	163,384	196	3,183
Clermont.....	10	84	32,870		3,287	138,589	517	8,515
Clinch.....					1,321	93,736	12	887
Payette.....					2,344	28,385	2	178
Franklin.....	6		19,075		2,764	249,147	26	1,306
Greene.....		1	8,600		1,349	80,944	39	1,726
Hamilton.....	41	69	68,214	134	3,944	66,791	608	8,204
Highland.....					2,278	175,904	25	258
Madison.....			500		1,887	78,677	8	494
Miami.....	1	1	3,200		1,485	162,674	38	1,439
Montgomery.....		2	9,578		1,592	14,111	33	1,155
Pickaway.....					927	90,188	5	419
Pike.....			8,300		1,968	114,585	201	1,218
Preble.....	1	1	800		2,097	224,713	89	3,563
Ross.....	3	880	6,650		4,587	202,676	322	3,563
Scioto.....	3	4,100	800		1,602	73,625	205	251
Warren.....	1		1,001	600	1,380	80,021	90	1,175
Totals.....	66	5,144	200,188	815	37,574	2,411,824	2,562	38,474
STATE TOTALS.								
	589	20,514	18,836,871	39,396	271,907	12,746,045	19,560	690,044

AGRICULTURAL STATISTICS—Continued.

Counties.	Orchards—Concluded.					
	Pears.		Cherries.		Plums.	
	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.	Acres occupied 1911.	Bushels produced 1911.
Adams.....	15	156	16	42	5	20
Brown.....	9	110	5	35	1	8
Butler.....	9	685	31	590	10	360
Clark.....	43	2,325	39	4,136	23	2,420
Clermont.....	441	14,649	34	535	17	515
Clinton.....	8	1,247		387		1,007
Fayette.....	10	711	2	1,085	3	184
Franklin.....	38	2,480	24	2,170	17	1,432
Greene.....	17	2,285	12	960	3	401
Hamilton.....	1,487	23,993	60	1,457	516	487
Highland.....		40	10	500		3
Madison.....	4	485		280		149
Miami.....	37	8,633	175	8,267	374	1,451
Montgomery.....	58	7,576	60	2,272	6	335
Pickaway.....	9	651	8	116	6	89
Pike.....	29	60	2	20		5
Preble.....	45	3,923	57	2,811	44	3,588
Ross.....	95	570	67	1,026	33	974
Scioto.....	21	65	7	154	4	54
Warren.....	96	2,864	9	485	42	527
Totals.....	2,467	73,508	638	27,518	765	14,010
					1,248	60,490

STATE TOTALS.					
	5,134	245,566	2,368	113,538	1,895
				58,320	5,080
					261,464

AGRICULTURAL STATISTICS—Continued.

Counties.	Lands Owned in 1911.				Horses.		Cattle.			
	Number of acres cultivated.	Number of acres pasture.	Number of acres woodland.	Number of acres lying waste.	Total No. of acres owned.	Number owned in April, 1912.	Beef cattle owned in April, 1912.	Milch cows owned in April, 1912.	All other cattle owned April, 1912.	Total No. owned in April, 1912.
Adams.....	88,671	99,691	63,195	26,344	277,901	5,286	52	4,272	4,482	8,806
Brown.....	96,507	127,719	18,761	11,143	254,220	6,832	509	6,714	4,333	11,556
Butler.....	138,650	59,525	15,603	11,863	225,641	8,542	375	9,242	4,701	14,318
Clark.....	103,780	59,392	11,228	2,960	177,360	8,048	1,151	8,353	5,823	15,327
Clermont.....	77,711	135,762	15,782	15,611	244,866	7,274	377	9,741	4,505	14,623
Clinton.....	112,990	19,629	69,033	23,861	225,513	9,400	886	6,526	5,225	12,637
Payette.....	87,630	69,055	8,489	1,513	167,191	6,759	2,628	3,199	3,340	8,978
Franklin.....	109,489	101,007	11,038	6,357	226,891	11,618	697	12,786	6,366	19,849
Greene.....	144,254	44,782	18,554	5,947	213,375	9,435	492	7,746	5,309	13,547
Hamilton.....	53,782	44,476	5,853	8,264	112,375	4,707	251	6,652	1,075	7,340
Highland.....	107,938	166,342	29,197	64,000	302,920	8,911	775	6,652	8,587	16,014
Madison.....	100,981	98,970	7,399	961	199,474	10,000	1,640	5,765	8,210	15,610
Marietta.....	184,416	21,150	10,106	3,802	199,474	10,253	436	8,896	3,694	13,026
Montgomery.....	138,358	40,531	15,438	9,543	203,870	10,756	430	11,740	4,120	16,290
Pickaway.....	148,656	100,391	14,183	7,705	270,935	10,004	1,340	5,905	8,516	15,761
Pike.....	65,027	43,860	59,065	16,817	184,769	3,196	177	2,183	2,765	5,125
Pike.....	163,889	41,472	36,740	8,490	250,591	10,723	576	8,715	5,384	14,740
Preble.....	128,511	118,608	42,658	21,163	310,940	9,920	1,575	5,691	7,706	14,972
Ross.....	69,119	37,706	60,486	29,259	185,460	4,359	300	4,124	3,833	8,257
Scioto.....	111,472	86,191	18,644	6,852	223,159	9,030	214	8,589	5,374	14,177
Warren.....	2,199,921	1,516,259	531,452	224,855	4,472,890	165,656	14,881	143,459	103,548	280,953
Total.....										

STATE TOTALS.

8,849,858	7,559,913	2,265,531	756,634	19,640,316	650,402	44,020	695,746	421,971	1,164,235
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AGRICULTURAL STATISTICS—Concluded.

Counties.	Domestic Animals Died from Diseases in 1911.									
	Horses.		Cattle.		Sheep.		Hogs.		Number.	Value.
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
Adams.....	179	\$11,905	147	\$3,778	225	\$842	267	\$1,984		
Brown.....	216	15,377	216	4,790	408	1,460	512	3,412		
Butler.....	287	26,525	272	9,252	390	1,653	9,203	62,839		
Clark.....	186	19,735	154	5,237	925	2,940	1,475	56,067		
Clermont.....	184	12,640	188	4,853	120	469	545	3,752		
Clinton.....	159	13,086	166	4,854	829	3,115	27,291	153,837		
Fayette.....	237	23,061	173	4,061	737	2,628	32,592	169,076		
Franklin.....	470	41,697	402	11,875	449	1,594	5,081	35,389		
Greene.....	222	21,495	140	4,135	716	3,007	1,110	63,978		
Hamilton.....	241	13,030	203	5,649	105	366	657	4,388		
Highland.....	169	13,408	111	3,292	524	1,929	7,224	35,040		
Madison.....	409	40,835	330	7,816	1,222	4,572	10,149	106,194		
Miami.....	358	36,904	292	7,972	155	707	899	6,239		
Montgomery.....	356	29,746	317	9,461	188	791	2,332	16,871		
Pickaway.....	302	33,580	163	4,750	492	1,583	12,290	66,814		
Pike.....	153	12,513	79	1,997	222	696	350	2,829		
Preble.....	238	23,725	267	7,568	340	1,617	8,519	59,835		
Ross.....	401	31,318	219	5,154	704	2,812	2,943	15,964		
Scioto.....	187	14,985	161	3,982	458	2,231	318	2,259		
Warren.....	218	17,348	233	6,300	365	1,402	10,543	67,613		
Totals.....	5,172	\$452,913	4,233	\$116,776	9,564	\$36,414	151,290	\$631,298		

STATE TOTALS			
21,328	\$1,647,595	16,226	\$451,991
		51,858	\$161,097
		212,584	\$1,332,212

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES.

Year.	Wheat.		Rye.		Buckwheat.	
	Acres sown for harvest.	Bushels produced.	Acres sown.	Bushels produced.	Acres sown.	Bushels produced.
1902	2,054,588	36,901,212	73,066	937,553	8,617	115,727
1903	1,981,573	29,074,367	41,180	416,735	7,835	109,651
1904	1,720,623	21,030,222	42,936	550,924	1,338	224,475
1905	1,878,197	32,462,786	60,400	813,532	11,908	193,629
1906	2,022,784	39,270,080	41,367	586,269	12,002	212,288
1907	2,009,731	30,918,367	42,087	571,858	12,670	200,024
1908	1,822,639	28,955,496	52,395	613,571	13,752	208,918
1909	1,738,691	27,393,444	61,340	769,914	21,051	384,152
1910	1,950,228	31,952,274	50,070	777,686	14,467	120,689
1911	1,973,742	30,047,056	58,166	716,600	10,937	193,273

Year.	Oats.		Winter Barley.		Spring Barley.	
	Acres sown.	Bushels produced.	Acres sown.	Bushels produced.	Acres sown.	Bushels produced.
1902	1,188,947	46,789,843	4,618	130,159	41,158	1,221,186
1903	1,213,228	37,305,993	3,749	78,988	35,068	734,593
1904	1,467,062	58,312,740	1,784	38,493	30,669	833,514
1905	1,449,112	49,731,954	1,649	32,260	21,528	520,731
1906	1,344,247	44,179,782	1,614	47,950	13,045	395,801
1907	1,429,792	33,906,233	1,605	40,836	16,712	435,400
1908	1,281,805	34,363,980	1,879	36,478	17,825	399,416
1909	1,584,858	49,061,678	1,355	25,559	18,742	441,804
1910	1,427,383	49,834,715	2,314	66,827	14,576	411,469
1911	1,431,120	47,837,403	2,347	60,415	21,197	507,407

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Continued.

Years.	Corn.			Ensilage Corn.		Broom Corn.		Sugar Corn.	
	Acres planted.	Bushels (shelled) produced.	Acres planted.	Acres planted.	Pounds broom brush produced.	Acres planted.	Pounds broom brush produced.	Acres planted.	Tons produced.
1902	3,160,066	122,675,349	22,668	686	288,080	9,371	22,386		
1903	2,945,473	92,820,349	24,917	227	138,483	18,069	71,071		
1904	3,006,756	100,529,653	28,554	278	85,649	19,244	77,500		
1905	2,865,190	108,538,592	26,373	220	80,910	12,735	47,427		
1906	3,011,241	127,044,784	24,346	157	67,623	8,117	42,555		
1907	2,894,113	100,620,205	81,934	191	128,246	9,536	37,774		
1908	2,840,594	102,622,908	82,461	206	50,295	11,898	40,946		
1909	3,281,595	127,218,227	88,244	112	43,897	14,698	90,572		
1910	3,026,710	110,803,783	60,455	809	389,731	19,474	68,858		
1911	1,945,618	112,122,314	55,591	483	127,418				

Years.	Tomatoes.		Peas.		Irish Potatoes.		Sweet Potatoes.	
	Acres planted.	Bushels produced.	Acres planted.	Pounds produced.	Acres planted.	Bushels produced.	Acres planted.	Bushels produced.
1902	4,342	661,452	655	617,419	113,064	10,507,822	790	80,828
1903	5,704	846,303	1,071	1,232,305	109,911	9,997,343	655	55,077
1904	4,904	635,972	1,154	1,200,448	124,826	11,922,075	1,463	47,543
1905	4,904	809,044	973	1,144,305	131,838	10,987,786	1,156	60,996
1906	5,493	847,923	1,982	1,288,173	126,683	13,616,184	1,158	55,120
1907	5,231	805,921	1,787	1,413,719	125,737	10,825,659	801	45,560
1908	6,585	782,754	3,615	2,633,580	134,667	10,555,238	307	22,939
1909	5,479	789,510	2,208	3,660,750	151,611	14,511,973	718	41,538
1910	5,895	934,527	3,918	2,289,657	144,916	12,313,622	310	30,047
1911					121,556	9,368,922	364	35,663

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Continued.

Years.	Onions.		Meadow.		Clover.		
	Acres planted.	Bushels produced.	Acres in grass (other than clover).	Tons of hay produced.	Acres grown.	Tons of hay produced.	Bushels of seed produced.
1902	2,820	733,748	1,658,397	1,844,802	937,791	1,026,948	420,985
1903	12,723	930,632	1,975,387	2,370,842	816,323	972,580	335,272
1904	3,608	640,755	2,240,354	2,685,502	823,248	666,937	241,514
1905	6,719	677,733	1,871,290	2,222,021	935,688	1,219,405	266,240
1906	4,530	1,041,890	2,124,791	2,254,338	489,991	1,425,507	143,735
1907	4,204	1,446,420	2,475,120	3,038,777	281,856	293,524	71,911
1908	4,493	1,346,191	2,168,404	2,567,364	974,041	1,132,515	805,974
1909	4,693	1,286,697	2,739,212	2,767,659	538,318	1,465,322	141,348
1910	4,301	1,386,860	1,859,021	2,150,163	1,073,920	1,395,384	234,716
1911	5,750	1,546,870	2,037,798	1,884,287	643,240	538,873	124,757
							119,582
							108,587
							103,264
							177,166
							80,290
							45,932
							76,809
							97,313
							117,704
							107,065

Years.	Alfalfa.		Flax.		Tobacco.		Milk.
	Acres grown.	Tons of hay.	Acres sown.	Bushels of seed.	Acres planted.	Pounds produced.	
1902			3,877	33,270	2,263,085	55,322	47,868,075
1903			1,826	16,138	1,245,005	50,877	45,823,607
1904			1,117	11,941	343,460	58,451	49,352,951
1905	10,832	24,890	1,114	9,179	860,026	65,625	58,004,027
1906	13,025	29,642	1,002	13,470	546,388	70,050	75,938,007
1907	12,852	22,360	540	4,383	339,450	73,358	53,261,454
1908	16,236	32,138	610	5,325	288,002	60,987	64,235,921
1909	21,704	49,796	514	4,225	351,900	91,701	72,273,052
1910	23,477	53,768	3,351	45,911	181,905	84,553	65,621,395
1911	25,159	54,513	1,477	10,836	529,891	64,776	69,351,938
							49,641,586
							39,343,870
							49,944,056
							55,332,685
							70,706,878
							56,744,968
							42,330,236
							72,273,052
							67,107,409
							64,678,567

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Continued.

Years.	Butter.			Cheese.			Eggs.	
	Pounds made in home dairies.	Pounds made in factories and creameries.	Pounds made in home dairies.	Pounds made in factories and creameries.	Number dozen produced.	Number dozen shipped beyond state.		
1902	46,328,278	8,658,780	937,238	15,531,953	64,902,956	1,117,229		
1903	46,510,481	7,537,848	2,162,866	12,309,415	61,424,927	1,273,298		
1904	46,793,854	7,071,753	1,783,968	13,149,892	63,776,936	2,377,100		
1905	47,634,723	8,381,405	1,202,717	12,671,152	68,322,894	1,535,880		
1906	46,203,105	8,226,688	2,140,431	13,250,346	82,849,942	1,755,981		
1907	47,941,752	6,484,567	1,421,181	9,555,133	73,759,953	849,706		
1908	48,025,333	7,941,513	1,919,844	8,501,072	72,160,393	757,289		
1909	49,280,511	16,900,634	2,091,049	6,914,983	85,119,673	674,810		
1910	47,555,075	11,864,524	845,086	13,789,906	88,183,810	940,020		
1911	46,152,937	15,363,573	755,280	5,094,617	81,133,885	1,578,795		

Years.	Sorghum.			Maple Products.			Honey.	Bees.
	Acres planted.	Pounds of sugar.	Gallons of syrup.	Number trees from which sugar or syrup was made.	Pounds of sugar.	Gallons of syrup.	Pounds of honey.	Number of hives.
1902	4,650	10,218	222,066	2,433,530	91,186	255,004	357,243	31,135
1903	2,648	2,384	85,213	3,090,704	281,841	905,875	475,944	20,463
1904	2,251	3,023	98,369	1,862,997	130,847	493,883	449,498	31,127
1905	2,047	4,240	103,802	2,988,519	231,307	980,334	487,016	37,614
1906	2,197	3,134	81,619	2,597,110	73,005	440,485	353,162	28,413
1907	1,501	1,466	46,554	3,976,911	169,226	950,305	344,738	57,814
1908	1,006	8,923	62,075	2,984,975	260,381	1,274,115	730,643	102,367
1909	2,322	5,600	124,117	2,811,268	55,891	727,346	375,063	55,617
1910	1,580	6,756	59,310	2,676,170	150,491	957,871	418,412	40,422
1911	1,794	2,384	68,450	2,516,977	42,936	583,351	309,523	26,287

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Continued.

Years.	Commercial Fertilizer.				Grapes and Wine.			
	Pounds used.		Cost of fertilizers used.		Acres (new) vineyard planted.	Whole number of acres in vineyard.	Pounds of grapes gathered.	Gallons of wine pressed.
1902	182,894,581		\$1,704,445		1,301	13,025	18,311,509	378,681
1903	180,857,217		1,764,788		1,531	11,982	17,726,151	223,322
1904	202,709,693		1,932,792		713	11,011	15,846,580	255,365
1905	230,615,393		2,238,193		904	12,568	19,668,102	85,760
1906	242,707,109		2,436,752		6,493	20,108	15,363,811	323,520
1907	236,042,903		2,433,627		529	17,399	15,389,057	107,141
1908	230,042,803		2,433,627		529	17,399	15,389,057	107,141
1909	232,517,524		3,764,483		4,491	19,198	13,406,433	251,510
1910	292,767,506		3,139,702		1,065	12,142	17,753,102	207,873
1911	349,016,233		4,220,591		943	6,916	8,683,407	57,077
	320,152,047		3,803,915		589	20,514	18,836,871	39,936

Orchards.

Years.	Apples.		Peaches.		Pears.		Cherries.		Plums.		Other Small Fruit.	
	Acres occupied.	Bushels produced.	Acres occupied.	Bushels produced.	Acres occupied.	Bushels produced.	Acres occupied.	Bushels produced.	Acres occupied.	Bushels produced.	Acres occupied.	Bushels produced.
1902	264,347	8,925,380	27,376	621,385	2,503	121,120	1,071	23,503	1,428	16,071	5,088	221,250
1903	248,743	8,841,415	25,516	385,120	3,183	85,437	755	8,513	1,676	54,666	5,242	238,525
1904	260,887	9,084,703	27,919	1,001,012	3,725	160,169	1,277	48,844	2,626	158,825	5,350	199,857
1905	241,765	2,773,067	21,837	583,618	2,935	81,437	1,233	23,019	1,574	37,472	5,067	224,513
1906	235,814	11,746,220	15,162	492,861	3,173	102,196	1,485	58,679	1,377	27,250	6,266	261,975
1907	243,716	2,474,252	17,410	268,284	2,841	41,501	801	3,690	1,143	16,141	5,680	285,901
1908	231,282	4,029,128	18,868	646,234	3,894	138,300	1,318	32,603	1,407	54,305	5,372	216,515
1909	240,660	3,058,485	20,315	455,652	3,689	102,970	1,949	69,321	1,737	32,477	6,973	213,430
1910	272,752	4,914,486	19,828	611,411	3,453	116,650	1,500	33,210	1,450	43,362	5,581	179,057
1911	271,507	12,746,045	19,566	690,014	5,134	245,566	2,308	113,538	1,895	58,329	5,089	261,464

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Continued.

Years	Lands Owned.					Horses.		Cattle.			
	Number of acres cultivated.	Number of acres pasture.	Number of acres woodland.	Number of acres lying waste.	Total number of acres owned.	Number owned.		Beef cattle owned.	Milch cows owned.	All other cattle owned.	Total number owned.
1902	10,190,560	6,135,234	2,577,765	579,735	19,483,294	554,841		88,460	681,511	592,440	1,362,411
1903	340,149	6,225,455	2,484,891	532,113	18,682,608	558,487		08,625	678,731	553,440	1,300,796
1904	165,882	6,620,446	2,470,801	664,782	18,921,913	572,078		58,901	688,645	526,329	1,276,875
1905	8,949,158	6,960,891	2,431,212	637,558	19,008,819	567,108		61,992	688,462	513,460	1,263,854
1906	8,703,239	6,857,336	2,461,181	707,044	18,728,800	568,327		54,678	669,457	450,142	1,183,295
1907	8,645,657	7,266,903	2,275,069	637,333	18,824,962	575,782		54,747	668,936	433,334	1,157,019
1908	8,156,080	7,834,621	2,265,867	608,763	19,331,937	589,840		50,924	669,442	441,796	1,151,934
1909	9,209,335	7,919,138	2,511,833	734,592	19,613,688	625,688		55,925	632,442	461,713	1,210,457
1910	9,116,197	7,462,914	2,340,373	771,594	19,873,664	639,283		56,211	703,206	467,539	1,234,089
1911	8,849,858	7,539,913	2,265,531	759,634	19,640,316	639,492		44,020	659,746	421,971	1,164,235

Years.	Sheep.			Hogs.		Wool.
	Number owned.	Killed by dogs.	Value.	Injured by dogs.	Value.	Pounds shorn.
1902	1,867,018	21,230	\$101,451	11,808	\$24,381	11,681,242
1903	1,782,121	18,543	62,140	10,413	21,973	11,762,687
1904	1,801,226	19,435	82,332	20,203	26,843	11,429,576
1905	1,936,302	16,607	73,165	11,213	26,907	11,930,237
1906	2,017,325	14,802	68,716	6,133	26,641	12,780,438
1907	2,162,517	15,530	74,327	8,032	29,554	13,534,168
1908	2,244,357	12,731	56,270	7,175	29,644	13,752,002
1909	2,246,322	15,041	69,404	7,088	20,764	16,396,633
1910	2,466,831	15,187	66,517	7,143	19,118	15,767,667
1911	2,008,213	17,630	67,360	7,134	16,613	15,711,368

AGRICULTURAL STATISTICS—TEN YEAR SCHEDULES—Concluded.

Years.	Domestic Animals Died From Disease.							
	Horses.		Cattle.		Sheep.		Hogs.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1902.....	12,231	\$825,034	17,983	\$441,173	53,382	\$151,625	122,072	\$741,802
1903.....	11,898	803,556	16,643	373,932	30,371	113,603	137,490	734,583
1904.....	12,772	854,766	16,442	370,822	33,503	112,707	72,234	366,061
1905.....	12,332	870,436	14,579	355,345	40,406	143,626	74,914	415,415
1906.....	12,182	977,911	13,683	341,382	40,393	168,263	57,533	370,284
1907.....	13,156	1,223,180	14,909	376,074	43,123	176,059	58,075	354,136
1908.....	13,613	1,111,495	12,441	8345..	37,178	143,393	77,886	414,811
1909.....	16,120	1,401,134	14,544	419,133	53,490	225,118	63,253	335,842
1910.....	14,948	1,408,820	15,079	445,473	40,252	154,175	83,463	603,963
1911.....	21,328	1,647,395	16,226	451,991	51,858	161,037	212,584	1,332,212

In Agricultural Statistics, Mercer County shows 1911 acreage of Irish Potatoes as 24,723 acres; should be 593 acres.
State totals for this item should be correspondingly less.

TABLES OF COMPARATIVE STATISTICS AS COMPILED BY THE SECRETARY OF AGRICULTURE

COMPARATIVE TABLE SHOWING PRODUCTION OF WHEAT IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams	118,537	121,334	193,445	164,956	167,935	195,150	184,193	175,516	148,545	178,584
Allen	270,170	218,272	156,061	226,305	173,198	16,332	368,417	201,866	524,268	524,268
Ashtabula	93,536	519,769	538,879	424,508	474,927	563,032	366,840	239,603	356,043	356,043
Ashland	154,287	154,287	88,328	86,817	94,912	166,717	103,991	18,432	134,833	134,833
Athens	90,668	90,668	90,750	67,986	69,989	89,359	94,125	86,082	83,066	81,015
Auglaize	429,887	312,445	472,434	472,434	926,106	135,251	523,108	332,561	471,651	862,535
Belmont	273,646	183,737	183,737	147,566	193,153	247,259	193,872	124,515	274,261	299,477
Brown	176,542	168,542	224,439	180,008	203,315	215,128	214,685	158,472	149,393	178,585
Buena Vista	773,734	675,678	473,453	591,173	984,496	1,147,199	928,657	654,191	707,537	1,103,105
Carroll	903,073	198,263	198,263	180,001	177,992	250,173	169,941	121,654	198,306	204,374
Champaign	438,072	383,183	298,707	399,603	422,765	513,749	382,263	180,371	458,138	623,121
Clark	433,769	151,202	242,663	352,417	361,439	522,098	464,266	275,020	399,583	587,708
Clermont	158,102	374,340	195,350	156,184	219,341	208,195	158,973	86,641	100,293	113,865
Columbiana	974,777	890,137	343,637	339,798	315,576	363,837	644,864	489,514	459,657	526,598
Coshocton	335,326	335,326	335,326	280,325	311,704	391,203	290,583	264,823	360,164	341,311
Crawford	262,395	626,439	367,823	433,517	502,343	339,645	537,429	148,294	303,451	333,663
Cuyahoga	712,895	172,125	415,897	433,517	502,343	339,645	537,429	390,777	401,127	499,291
Darke	676,388	172,125	137,796	125,635	132,725	160,613	155,941	89,477	141,486	199,345
Delaware	460,370	293,847	333,126	836,888	691,013	1,217,299	940,446	335,161	815,840	1,253,069
Franklin	284,103	284,103	236,120	230,947	333,597	301,748	313,761	174,806	150,951	218,495
Fayette	319,845	335,972	302,106	278,961	236,460	260,729	223,417	156,852	124,857	136,167
Fayette	845,323	689,911	672,807	417,468	696,444	173,091	698,433	606,372	583,477	347,229
Franklin	436,455	581,951	526,026	332,519	471,489	660,292	517,428	392,219	425,866	591,968
Franklin	720,262	531,372	503,240	397,734	449,283	584,232	435,088	415,764	346,865	611,380
Fulton	388,492	293,497	293,497	260,825	260,825	229,581	254,696	125,359	346,865	453,293
Gallia	101,589	121,254	141,131	114,131	155,584	141,456	110,384	98,537	173,507	204,034
Geauga	90,765	109,172	69,784	89,463	99,372	95,066	107,843	98,537	116,478	85,019
Greene	647,392	632,072	316,458	531,677	721,592	800,772	608,970	357,349	593,092	120,182
Guernsey	151,706	151,706	151,706	107,020	146,028	190,838	142,163	143,338	143,338	859,786
Hamilton	295,410	222,106	124,239	207,002	260,762	296,276	237,689	147,468	435,715	466,168
Hancock	537,297	541,038	403,207	474,991	536,095	736,245	626,210	298,599	509,804	867,477
Hardin	178,684	178,684	78,838	137,517	228,464	163,943	291,809	132,458	303,581	469,907
Harrison	131,930	131,930	129,433	120,430	128,368	163,943	126,369	62,962	161,842	196,065
Henry	532,143	294,093	403,608	437,279	498,336	465,149	365,942	146,945	335,378	602,263
Hocking	442,172	441,267	532,092	377,514	512,446	566,981	369,942	440,412	323,171	112,283
Hocking	136,362	109,922	726,701	96,757	126,644	132,113	142,252	113,155	129,578	602,263
Holmes	348,020	470,088	426,326	440,273	460,253	425,285	308,785	227,257	456,296	439,892
Huron	738,230	738,230	771,143	632,243	597,516	815,564	626,893	395,487	475,545	667,478
Jackson	77,993	84,547	84,547	97,911	71,613	78,966	60,787	50,820	67,904	50,162
Jefferson	135,335	169,376	145,215	149,536	150,790	180,392	148,687	88,091	183,173	216,457

CROP AND OTHER STATISTICS

189

Knox	385,419	429,047	433,157	420,728	420,461	422,070	420,960	419,860	429,047	326,189
Lake	57,903	73,263	48,238	54,010	57,133	68,415	64,219	20,185	53,577	64,341
Lawrence	17,550	32,624	30,945	23,168	27,942	31,847	32,614	27,223	31,141	35,903
Licking	576,993	494,770	417,611	292,140	419,068	508,258	393,717	334,372	334,272	372,444
Logan	193,772	143,512	100,692	207,899	238,513	428,958	294,837	99,640	372,444	609,775
Lorain	328,885	481,547	330,508	366,693	344,327	492,292	404,248	258,328	356,819	539,684
Lucas	398,380	127,283	163,183	136,797	194,632	141,287	158,984	53,968	122,761	193,038
Madison	450,713	335,681	306,115	314,356	369,029	421,978	151,838	108,951	136,341	193,038
Mahoning	188,363	315,074	257,129	254,206	212,167	225,780	397,965	184,328	274,480	235,104
Marion	267,251	284,797	203,918	215,671	322,002	341,825	279,520	222,524	302,524	255,104
Medina	283,186	530,109	450,961	420,020	431,299	435,684	453,328	308,927	383,886	431,984
Melms	140,687	147,690	169,018	121,159	140,929	164,146	137,140	119,100	135,531	125,041
Mercer	448,625	403,676	246,446	433,697	224,517	887,215	605,498	417,556	450,140	565,585
Miami	593,771	585,827	248,743	640,810	533,489	962,924	748,855	406,288	619,491	857,574
Monroe	138,147	144,008	103,847	103,847	149,867	198,024	187,928	138,499	215,103	184,316
Montgomery	640,093	557,477	343,687	544,311	699,470	788,469	701,389	118,074	616,037	905,662
Morgan	169,984	155,180	155,498	155,498	149,583	184,285	179,101	160,337	141,511	113,575
Morrow	212,075	386,492	250,583	277,445	289,521	299,521	275,155	207,327	276,238	218,659
Muskingum	351,930	314,023	273,168	128,206	323,684	382,934	289,315	335,024	283,968	298,752
Noble	110,433	122,764	127,639	80,295	174,367	155,507	155,507	106,963	154,141	134,782
Ottawa	236,341	240,906	123,113	161,740	243,361	300,338	230,048	122,332	151,418	323,997
Paulding	179,480	114,225	104,757	128,001	153,025	213,569	201,098	312,008	153,955	224,948
Perry	955,452	916,626	924,022	927,156	227,824	273,494	212,819	312,321	181,770	183,869
Pickaway	1,718,680	1,019,091	1,202,498	937,156	1,154,864	689,728	682,922	739,631	684,020	885,637
Pike	385,365	139,365	221,918	167,050	313,718	311,393	327,380	133,060	94,712	108,481
Portage	268,864	385,649	380,392	144,004	80,490	831,022	590,716	327,397	531,004	1,061,637
Preble	492,948	629,649	352,605	174,004	415,615	503,472	590,716	199,355	525,683	660,615
Putnam	421,134	326,312	270,044	456,480	583,535	913,544	581,504	363,954	607,350	553,559
Richland	314,947	645,860	575,969	533,238	703,699	763,752	664,366	551,973	462,762	572,107
Ross	917,827	511,976	647,534	620,690	703,699	729,257	519,199	259,329	449,389	665,273
Sandusky	150,346	566,784	550,580	547,575	535,228	429,257	164,486	164,860	130,278	141,060
Scioto	174,338	176,409	202,705	163,401	191,607	218,898	184,898	547,829	723,383	1,052,917
Seneca	774,015	1,082,579	873,292	849,314	1,056,668	1,286,689	964,433	349,980	450,286	805,963
Shelby	36,503	483,328	283,691	483,328	297,797	566,558	464,576	601,367	891,239	978,886
Stark	552,183	875,273	865,943	888,385	781,090	941,182	753,267	601,367	891,239	978,886
Summit	292,698	452,361	469,259	421,279	384,244	484,191	430,401	274,818	427,288	489,085
Trumbull	139,881	287,628	163,858	139,477	128,151	102,472	161,521	70,359	207,699	188,209
Tuscarawas	244,993	380,454	380,381	351,440	365,784	423,472	356,607	190,983	408,564	417,197
Union	246,948	278,310	138,722	147,844	241,276	202,783	189,160	166,324	170,175	230,449
Van Wert	195,749	160,309	87,990	208,481	190,274	557,124	414,017	278,222	322,420	471,458
Vinton	68,635	52,545	54,524	42,348	55,225	44,029	40,685	40,685	58,961	58,714
Warren	422,901	353,982	285,845	384,282	536,752	611,144	444,263	304,870	358,854	446,659
Washington	235,144	261,267	239,565	165,987	216,164	295,570	290,031	219,297	251,281	221,023
Wayne	705,398	1,171,469	1,138,882	993,026	835,668	1,094,255	629,155	629,155	900,144	926,362
Williams	366,458	372,030	319,524	248,977	235,451	312,658	187,200	187,200	233,449	233,624
Wood	511,434	341,342	295,451	424,893	420,430	573,324	502,459	157,958	453,687	562,169
Wyandot	386,696	451,809	382,689	378,247	514,649	568,010	419,027	279,306	335,328	391,401
Total products	30,240,828	31,952,274	27,393,444	28,955,496	30,918,367	39,279,680	32,462,786	21,090,222	29,074,367	36,901,212
Total area	1,984,395	1,950,228	1,738,691	1,822,639	2,009,731	2,022,784	1,878,197	1,720,623	1,981,573	2,054,588

Average area for 10 years, 1,916,345 acres.

Average product for 10 years, 30,826,868 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF BARLEY IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
(Includes Fall and Spring Barley.)										
Adams.....	100		21	15,412	12,270	4,406	5,507	5,635	4,237	14,139
Allen.....	26,319	19,916	20,807	521	733	723	536	1,216	2,651	3,317
Ashland.....	820	811	1,201	448	406	233	570	573	636	1,263
Astabula.....	31		404	250				356		
Athens.....	11,428	5,151	2,431	1,509	3,054	200	1,107	1,120	512	3,527
Auglaize.....	655	560	190	324	185	18,035	360	186	78	451
Belmont.....						900		80	20	2
Brown.....						11,890	11,335	20,124	35,196	56,519
Butler.....	9,310	4,911	13,705	16,815	11,820	280			45	
Carroll.....			2	15	100	490	4,583	1,890	2,040	1,384
Champaign.....	122	1,197	2,275	110	4,294	1,060	3,675	2,620	620	2,121
Clark.....	12,530	3,580	2,717	1,180	1,123		753		8	
Clermont.....	236	12	40				2,232	518	90	3,155
Columbiana.....	54	2,115	830	15	45	2,330	65	60	65	255
Coshocton.....		30	152		14	30		84	118	453
Crawford.....	3,092	70	28	130	14	1,346		825	1,944	3,344
Cuyahoga.....	510	2,236	1,913	1,971	1,000	50	1,481			
Darke.....	1,953	4,777	788	1,105	910	155	1,498	1,110	282	658
Defiance.....	30,004	4,793	2,143	760	1,328	17,480	1,535	2,430	2,516	5,320
Delaware.....	30	21,202	28,136	19,577	20,472	185	31,581	45,274	52,472	83,678
Eric.....		649	28	28	317	390	360			232
Erle.....	10,656	6,099	2,722	4,497	5,631	3,900	4,220	9,190	6,555	10,674
Fairfield.....	160	1,244		130	548	35	431		1,335	1,650
Fayette.....	850	503	511			405	975		360	1,045
Franklin.....		16,770	681	170	1,200			250	340	167
Fulton.....	43,291	32,767	30,063	35,674	45,444	34,961	38,529	33,319	29,123	32,189
Gallia.....	165	140	156	130	818	60	20	150	180	768
Geauga.....	2,520	2,326	375	375	4,085	761	511	180	96	1,203
Greene.....	403	672	999	236	311	890	758	180	75	225
Guernsey.....	1,527	548	1,666	1,430	750	1,022	125	98	4,820	6,167
Hamilton.....	13,141	6,002	4,299	7,647	7,978	3,351	385	2,394	4,390	16,385
Hancock.....	2,450	2,259	1,625	2,195	740	385	1,714	4,537	1,414	5,254
Hardin.....	30		335	175	205	280	207	60		
Harrison.....			54,137	57,004	65,215	83,138	94,730	105,424	88,763	127,350
Hevy.....	64,122	53,606			1,100	440	1,137	1,080	500	1,241
Highland.....	1,100	1,325		25			60			
Hocking.....		84								
Holmes.....	690	240	467	229				580		887
Huron.....			1,529	2,030	962	1,020	1,509		1,285	3,946
Jackson.....	1,611	1,098		200					200	

	180	275	145	40	35	208	80	320	260	527
Jefferson.....	100	185	251	611	1,021	925	875	3,402	1,284	527
Knox.....	100	809	916		340	60				540
Lake.....	1,036				283					632
Lafayette.....					5,520	3,630	720	816	620	140
Licking.....	8,208	9,579	125	320	283	2,474	3,456	1,536	2,533	800
Logan.....	2,739	3,492	7,118	3,583	1,260	2,474	2,694	1,273	1,125	4,731
Lorain.....	44,000	26,794	4,406	3,226	3,533	31,540	26,995	20,192	16,130	1,641
Lucas.....	1,400	3,536	1,137	905	4,140	1,144	4,112	1,392	800	19,135
Madison.....	13,760			75		560	634			1,727
Maioning.....	188	1,385	845	512	215	1,541	655	590	200	473
Marion.....	188	460	642	1,400	1,254	1,541	583	2,048	438	532
Medina.....	270					4,930	20	24		1,447
Meigs.....	60	35	35	5,031	0,862	140	13,588	23,046	15,439	37,330
Mercer.....	24,790	26,672	1,130	19	300	140	368			420
Miami.....	500	101	795							93
Monroe.....	107	67	54		374	1,300	1,808	875	1,670	3,120
Montgomery.....	2,381	3,050	3,260	1,385	2	119	100	48		30
Morgan.....			124		25	184	220			576
Morrow.....	80	307	180		8					623
Muskingum.....	73		90	40		37,650		120	740	
Noble.....	409	265	271	80		20,240	37,596	167,008	59,467	57,332
Ottawa.....	52,291	23,204	2,335	34,933	37,477	80	49,507	138,490	140,450	91,805
Paulding.....	6,599	4,402	4,927	9,158	1,124		276			450
Perry.....		130		56				375		253
Pickaway.....					40	400				
Pike.....	100			40	100	461	316	198	438	157
Portage.....	74	82	38	149	162	280	230	378	277	1,840
Preble.....	450	1,415	1,798	262	1,540	25,488	1,430	551	52,639	92,542
Putnam.....	66,915	53,970	55,617	34,932	40,348	1,052	46,606	49,300	2,164	4,976
Richland.....	462	571	571	1,240	1,496	190	840	1,472	20	1,190
Ross.....	260	180	65		375	5,583	657	468	7,904	9,257
Sandusky.....	10,933	10,105	6,866	7,896	4,763		2,134	10,180		
Scioto.....	140					2,208				
Seneca.....	2,257	1,889	1,329	3,874	4,800	375	1,558	6,048	1,358	4,724
Shelby.....	4,761	573	260	350	954	80	370	2,400	24	1,374
Stark.....	787	1,532	389	47	81	1,771	292	462	199	351
Summit.....	120	105	1,072	1,083	1,227	135	1,726	713	840	781
Trumbull.....	19	810	90	200	21	155	30	1,000	128	432
Tuscarawas.....		58	60			899	75		100	100
Union.....	992	304	328	328	1,708	28	1,045	770	600	1,181
Van Wert.....	17,915	39,445	39,445	33,140	41,155	587	50,613	88,780	123,249	241,963
Vinton.....										
Warren.....	1,750	5,545	14,920	1,010	6,260	2,350	1,350	3,438	10,015	17,287
Washington.....	156	202	160			106		88	54	25
Wayne.....	100	421	504	519	320	725	627	484	1,080	1,651
Williams.....	25,326	27,697	31,833	33,900	36,694	53,549	37,639	42,543	40,536	42,679
Wood.....	31,879	31,879	25,332	34,418	32,825	18,208	38,712	68,100	81,891	114,428
Wyandot.....	1,014	1,754	736	411		1,260	564	6,525	5,775	990
Total product.....	576,030	1,478,296	467,463	432,894	476,236	443,751	552,991	975,192	813,581	1,351,345
Total area.....	24,779	16,890	20,097	19,704	18,317	14,659	23,177	35,398	38,817	45,776

Average area for 10 years, 25,763 acres.
Average product for 10 years, 656,778 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF RYE IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	5,988	4,213	4,338	2,965	1,774	1,535	4,021	6,935	3,075	6,551
Allen.....	58,170	41,173	37,087	37,948	14,550	14,677	8,924	3,151	2,939	9,031
Ashtabula.....	2,994	4,630	7,434	5,073	2,644	3,431	3,656	2,814	5,519	8,961
Ashtabula.....	10,220	15,624	15,488	10,485	11,455	15,977	21,030	6,362	12,115	21,123
Athens.....	131	226	300	147	343	89	386	1,020	555	555
Auglaire.....	9,375	16,795	6,759	11,038	6,746	7,671	7,942	3,872	2,184	6,306
Belmont.....	2,771	2,210	2,284	757	2,286	1,882	1,828	1,440	2,212	2,652
Brown.....	18,648	19,953	43,197	16,063	11,111	6,948	19,900	28,784	13,146	15,377
Butler.....	7,238	5,228	3,044	2,324	1,862	3,078	4,546	3,411	3,768	5,861
Carroll.....	516	1,048	1,250	1,118	1,565	1,203	1,496	1,562	482	1,816
Campaign.....	12,359	20,907	14,305	14,828	15,141	9,510	15,264	5,490	4,559	10,768
Clark.....	27,164	21,892	13,917	10,486	11,598	11,526	24,368	9,866	5,403	7,979
Clermont.....	14,848	17,694	28,807	12,606	10,121	8,804	25,448	20,241	9,170	19,916
Clinton.....	17,932	16,878	29,503	9,075	5,682	5,896	12,761	10,278	6,716	10,098
Columbiana.....	1,225	4,432	4,133	3,213	2,493	2,358	3,183	2,309	2,401	3,932
Coshocton.....	2,665	2,135	2,773	1,713	1,394	2,159	2,582	1,671	1,783	9,857
Crawford.....	1,634	1,491	2,555	1,592	1,551	1,080	769	1,370	1,036	4,515
Cuyahoga.....	3,705	9,584	13,959	10,254	8,071	10,732	18,410	6,858	9,489	14,557
Darke.....	31,504	25,733	16,179	17,073	11,610	9,882	18,220	4,741	3,455	7,160
Defiance.....	4,340	2,924	3,315	5,341	12,151	3,797	9,244	5,594	1,377	3,293
Delaware.....	14,012	24,962	26,128	10,790	8,027	7,266	10,338	6,494	6,371	12,293
Eric.....	5,074	5,805	9,061	5,025	5,357	6,378	8,648	2,948	4,644	10,424
Fairfield.....	5,480	17,301	17,301	3,710	3,036	6,992	2,337	7,693	1,086	12,433
Fayette.....	7,109	7,453	7,453	8,098	2,115	10,471	12,169	23,561	1,708	13,146
Franklin.....	10,332	23,159	21,178	8,098	5,893	6,338	12,497	9,389	11,229	15,901
Fulton.....	2,977	3,159	11,849	9,517	14,406	13,718	19,416	6,369	3,412	6,482
Gallia.....	5,916	912	840	1,300	840	3,577	2,213	1,363	2,640	10,435
Geauga.....	1,392	3,953	3,636	2,063	2,983	3,765	3,803	1,468	3,073	1,432
Greene.....	21,067	23,141	11,868	7,419	12,227	15,265	33,711	12,047	1,554	10,953
Guernsey.....	2,989	1,882	1,788	1,213	1,847	1,631	1,847	3,453	1,030	12,624
Hamilton.....	6,946	9,969	7,632	3,644	6,892	5,354	9,358	3,369	11,030	12,624
Hancock.....	18,356	14,024	12,491	11,828	10,622	9,664	8,055	3,369	4,328	10,953
Hardin.....	34,324	38,719	20,931	12,919	12,918	9,563	9,722	2,235	5,361	22,136
Harrison.....	470	702	381	311	610	303	920	646	177	981
Henry.....	5,894	1,341	7,830	13,873	23,454	21,458	33,795	21,349	27,217	62,212
Highland.....	9,817	9,672	23,931	3,369	3,442	1,793	6,865	8,910	2,528	16,230
Hocking.....	918	807	963	662	683	262	1,286	1,978	2,188	3,606
Holmes.....	2,783	2,311	5,013	3,071	3,317	2,292	3,395	1,863	3,647	8,058
Huron.....	902	1,840	3,907	3,545	1,720	2,230	3,373	1,495	330	4,527
Jackson.....	386	736	151	536	145	326	736	644	664	1,029
Jefferson.....	2,584	1,480	1,457	151	1,457	784	1,006	495	537	1,529
Knox.....	10,340	8,841	11,166	6,031	5,900	5,349	5,306	5,186	7,403	19,284

	6,173	12,818	15,842	11,082	11,185	9,517	17,872	7,428	9,185	13,373
Lake.....	345	33	83	71	122	308	211	504	205	1,417
Lawrence.....	23,764	30,937	39,688	12,879	8,133	12,024	16,180	28,194	18,433	44,291
Licking.....	24,637	26,417	13,033	26,436	24,526	30,815	24,904	10,051	11,035	20,789
Logan.....	2,081	4,083	7,010	6,351	2,907	7,384	7,971	3,132	3,895	2,845
Lorain.....	12,234	17,222	17,982	18,571	24,367	25,610	24,088	8,904	7,916	20,885
Lucas.....	5,869	10,578	3,451	3,451	8,852	4,581	13,698	7,293	3,154	15,168
Madison.....	999	4,510	10,850	6,706	3,317	2,423	13,173	2,763	3,184	4,351
Mahoning.....	7,102	3,935	1,737	3,670	3,670	2,118	5,493	4,937	4,401	8,684
Marion.....	1,879	11,000	13,913	9,279	9,279	9,893	17,908	8,410	10,965	18,799
Medina.....	559	1,147	1,566	567	227	303	2,320	2,640	1,825	2,215
Mercer.....	11,093	10,845	3,713	12,487	6,731	6,334	4,127	4,028	1,986	4,046
Miami.....	4,713	3,987	1,940	1,901	1,866	1,718	4,416	905	625	1,561
Monroe.....	5,752	4,099	4,797	1,325	2,021	1,459	2,160	2,087	2,847	5,719
Montgomery.....	13,869	9,271	4,569	4,916	4,916	4,871	9,216	3,762	1,836	9,968
Morgan.....	997	904	1,611	448	4,415	1,921	1,689	1,747	1,586	1,406
Morrow.....	4,934	8,688	12,443	5,133	7,462	3,736	5,685	2,776	9,008	22,222
Muskingum.....	3,739	4,950	2,807	2,556	2,643	2,535	5,291	6,358	5,643	12,960
Noble.....	633	590	1,187	353	698	625	7,982	890	1,286	1,361
Ottawa.....	4,125	2,883	2,605	8,338	9,295	10,300	7,363	1,920	2,280	9,474
Paulding.....	16,718	9,038	9,788	24,640	25,759	48,338	31,006	84,277	9,902	30,001
Perry.....	2,796	1,789	5,533	1,981	1,170	861	2,083	4,408	2,487	5,454
Pickaway.....	708	2,180	5,119	3,310	1,978	2,040	7,709	6,834	1,984	7,156
Pike.....	755	6,573	1,346	696	340	665	1,103	2,387	1,582	3,620
Portage.....	1,502	6,077	4,570	4,298	2,479	3,161	9,825	2,854	5,241	8,763
Preble.....	9,070	4,357	2,798	3,278	2,479	3,161	9,825	3,087	465	2,104
Putnam.....	25,751	25,007	11,713	20,368	4,360	5,230	9,312	13,435	11,740	33,324
Richland.....	3,483	3,571	6,993	4,734	4,149	3,917	5,931	3,871	5,387	11,945
Ross.....	7,100	2,583	8,867	3,215	2,376	1,224	5,840	4,904	2,673	5,916
Sandusky.....	3,022	5,664	8,554	8,979	8,979	5,057	5,717	3,038	2,592	13,095
Scioto.....	1,130	1,443	1,359	1,837	697	88,454	433	836	488	1,052
Seneca.....	1,573	2,617	1,355	2,606	2,606	3,192	3,900	1,205	815	4,840
Shelby.....	6,213	2,350	2,955	4,069	5,833	1,855	2,252	1,335	690	5,704
Shark.....	1,285	5,927	3,345	3,892	3,597	3,879	3,916	3,313	3,318	6,009
Summit.....	1,070	2,324	3,363	3,562	2,477	5,691	6,473	2,125	4,594	6,546
Tumbull.....	1,089	10,562	3,170	6,366	6,085	3,421	6,740	1,844	1,434	5,855
Tuscarawas.....	3,564	3,740	3,900	3,768	3,900	2,709	2,709	1,523	2,307	9,811
Union.....	21,652	33,455	29,027	18,158	23,306	14,545	15,644	14,848	9,067	15,365
Van Wert.....	21,812	28,535	15,276	40,598	29,335	37,622	24,974	9,719	10,396	23,085
Vinton.....	87	12	211	80	480	873	873	2,103	3,303	2,103
Warren.....	19,934	21,325	7,267	5,516	7,919	15,753	9,186	3,718	12,522	12,522
Washington.....	1,572	2,362	1,324	972	1,324	836	1,653	1,912	1,480	1,453
Wayne.....	1,967	922	3,809	2,941	1,958	5,313	6,551	3,554	5,341	11,221
Williams.....	3,180	2,886	4,005	4,556	10,939	7,525	11,043	4,839	3,157	3,199
Wood.....	6,181	6,221	9,887	11,935	15,584	15,584	5,187	3,533	5,401	15,277
Wyandot.....	5,354	6,072	2,626	3,243	1,975	500	5,187	1,179	1,848	3,872
Total product.....	741,237	777,089	769,914	613,571	571,858	586,269	813,532	550,924	416,735	987,553
Total area.....	60,239	59,070	61,340	52,395	42,087	41,307	60,400	42,996	41,180	73,066

Average product for 10 years, 682,928 bushels
Average area for 10 years, 53,414 acres.

COMPARATIVE TABLE SHOWING PRODUCTION OF OATS IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	20,718	44,028	21,738	4,376	25,434	48,438	78,242	81,223	59,534	94,721
Allen.....	872,523	887,859	758,051	481,220	622,045	630,632	578,986	605,147	302,810	432,052
Ashland.....	619,992	807,217	765,361	567,639	547,627	633,377	736,244	713,459	565,082	772,298
Ashtabula.....	376,970	1,078,131	833,113	697,206	534,749	684,932	879,549	592,084	869,065	872,233
Athens.....	34,652	34,877	26,767	8,090	17,500	36,488	50,489	47,550	22,175	38,504
Auglaize.....	874,812	856,792	722,846	580,093	872,276	762,172	783,205	961,681	471,366	660,775
Belmont.....	253,575	253,575	225,325	163,319	174,153	210,483	269,008	331,365	192,775	224,532
Brown.....	20,372	88,251	84,318	13,484	58,120	81,243	185,690	211,317	133,567	278,823
Butler.....	102,882	231,193	413,908	55,244	141,840	211,672	364,545	377,936	331,410	371,666
Carroll.....	383,094	428,774	361,578	328,936	684,116	768,787	380,933	373,558	602,733	632,413
Champaign.....	713,177	846,652	1,044,006	472,559	298,624	343,454	498,913	1,383,138	302,931	747,141
Clark.....	211,165	371,473	427,646	174,668	90,702	178,154	307,068	347,474	175,627	322,620
Clermont.....	50,154	136,828	124,110	26,268	70,851	161,479	345,918	377,170	121,359	356,069
Clinton.....	59,347	90,639	120,153	22,219	459,226	600,678	695,977	563,103	621,583	299,789
Columbiana.....	519,708	695,385	607,922	531,552	314,405	274,720	326,836	412,558	826,228	1,076,557
Coshocton.....	237,669	296,065	299,592	223,740	602,270	868,707	930,760	1,096,031	608,013	631,881
Crawford.....	933,133	1,078,487	1,005,254	738,767	349,409	433,796	590,053	540,886	650,324	916,847
Cuyahoga.....	424,451	501,693	561,539	464,307	1,072,091	1,170,064	1,624,443	1,935,936	637,513	1,002,549
Darke.....	1,170,457	1,344,193	1,327,984	694,051	692,612	962,944	956,898	1,099,256	376,035	496,053
Delaware.....	1,434,836	1,144,273	1,177,953	653,158	206,276	400,393	438,407	467,325	157,227	216,661
Deane.....	228,186	352,409	319,585	187,132	385,707	534,215	508,520	620,372	486,931	501,151
Delaware.....	498,758	527,274	413,124	560,423	51,545	103,899	150,403	241,781	98,763	171,756
Erle.....	87,789	87,789	84,258	32,135	657,896	1,014,936	956,272	1,137,696	858,426	1,121,673
Fairfield.....	51,151	80,787	79,274	26,104	51,569	140,013	448,747	583,540	421,819	545,233
Fayette.....	146,263	299,680	280,487	129,024	180,756	140,013	532,719	690,448	157,227	216,661
Franklin.....	1,020,544	1,087,866	944,564	702,481	657,896	1,014,936	956,272	1,137,696	858,426	1,121,673
Fulton.....	323,043	323,043	22,226	10,151	378,580	473,719	595,157	421,081	513,083	544,777
Gallia.....	537,142	658,506	600,241	506,530	378,580	219,224	401,869	487,888	146,099	295,258
Geauga.....	258,811	258,811	301,749	60,148	100,236	219,224	401,869	487,888	146,099	295,258
Greene.....	113,574	144,716	126,054	85,788	93,883	146,758	177,845	202,027	118,181	156,327
Guernsey.....	46,582	85,770	127,806	15,424	52,929	67,366	130,753	116,309	177,195	164,841
Hamilton.....	807,483	743,970	743,970	578,129	573,925	633,618	639,079	1,027,963	418,634	600,466
Hancock.....	761,138	362,619	587,197	362,619	491,876	612,350	577,257	949,606	485,710	525,958
Hardin.....	210,620	210,620	188,745	160,114	161,117	206,179	223,409	264,836	161,366	215,798
Harrison.....	1,499,604	1,499,604	1,348,015	1,052,717	873,051	1,128,440	996,337	1,455,283	694,690	897,276
Henry.....	79,474	69,474	71,179	13,205	44,466	70,921	170,365	190,146	83,275	156,285
HIGHLAND.....	37,365	20,724	18,833	10,094	20,120	30,355	58,164	64,811	39,939	86,734
Hocking.....	18,746	635,552	603,097	501,798	420,436	514,683	657,480	1,014,322	572,156	619,259
Holmes.....	561,825	561,825	603,097	501,798	420,436	514,683	657,480	1,014,322	572,156	619,259
Huron.....	1,012,160	1,112,104	1,218,056	1,190,657	654,522	932,684	1,023,233	1,203,669	930,569	1,125,441
Jackson.....	23,333	22,098	4,632	4,632	14,500	24,080	30,870	28,638	21,715	30,580
Jackson.....	300,078	267,808	258,248	267,808	258,248	304,451	338,220	350,573	292,340	351,510
Jefferson.....	250,008	250,008	250,008	250,008	258,248	304,451	338,220	350,573	292,340	351,510
Knox.....	173,393	275,808	258,550	320,181	318,955	324,212	323,879	323,874	345,606	382,102

Lake.....	272,304	315,126	340,030	204,820	231,040	206,169	316,180	320,520	290,652	270,930
Lawrence.....	42,304	40,205	51,104	9,150	63,307	41,428	92,001	67,614	39,139	42,477
Licking.....	174,734	246,963	250,066	145,082	250,513	332,637	414,817	492,783	348,527	431,197
Logan.....	773,589	928,364	919,007	485,338	998,591	832,490	737,048	1,813,388	402,900	535,263
Lorain.....	773,140	931,828	913,416	809,693	450,521	598,821	585,329	1,063,969	825,590	878,062
Lucas.....	790,963	907,470	460,470	497,030	428,540	598,821	585,329	1,063,969	776,239	892,978
Madison.....	520,584	765,307	769,813	367,111	526,540	823,710	913,717	1,411,398	508,044	819,462
Madison.....	520,584	765,307	769,813	367,111	526,540	823,710	913,717	1,411,398	508,044	819,462
Marion.....	830,101	608,321	503,930	410,727	391,834	663,349	589,389	585,144	602,902	916,449
Marion.....	830,101	608,321	503,930	410,727	391,834	663,349	589,389	585,144	602,902	916,449
Medina.....	1,561,733	878,327	764,615	801,995	535,043	754,072	832,527	826,508	976,539	976,539
Medina.....	1,561,733	878,327	764,615	801,995	535,043	754,072	832,527	826,508	976,539	976,539
Mercer.....	43,207	36,612	12,476	12,476	29,367	58,855	80,328	61,965	36,537	54,241
Mercer.....	43,207	36,612	12,476	12,476	29,367	58,855	80,328	61,965	36,537	54,241
Montgomery.....	1,267,533	1,364,063	1,170,975	792,200	1,276,912	1,137,793	1,186,082	1,164,130	659,469	966,559
Montgomery.....	1,267,533	1,364,063	1,170,975	792,200	1,276,912	1,137,793	1,186,082	1,164,130	659,469	966,559
Niamei.....	765,228	932,742	1,044,281	380,561	613,000	851,702	1,147,720	1,261,234	602,547	881,127
Niamei.....	765,228	932,742	1,044,281	380,561	613,000	851,702	1,147,720	1,261,234	602,547	881,127
Monroe.....	184,929	157,495	131,050	74,608	106,908	148,037	184,027	186,766	139,024	163,794
Monroe.....	184,929	157,495	131,050	74,608	106,908	148,037	184,027	186,766	139,024	163,794
Montgomery.....	202,776	408,165	540,320	141,655	215,885	367,250	727,766	101,016	286,054	520,869
Morgan.....	49,396	52,882	46,539	17,758	33,242	63,915	79,847	105,393	55,393	70,789
Morgan.....	49,396	52,882	46,539	17,758	33,242	63,915	79,847	105,393	55,393	70,789
Morrow.....	352,451	489,367	464,469	332,752	300,886	537,036	500,254	672,992	530,865	782,992
Morrow.....	352,451	489,367	464,469	332,752	300,886	537,036	500,254	672,992	530,865	782,992
Muskogum.....	107,955	142,576	133,796	81,427	103,668	179,774	210,695	258,102	148,818	198,887
Muskogum.....	107,955	142,576	133,796	81,427	103,668	179,774	210,695	258,102	148,818	198,887
Noble.....	63,110	51,209	48,870	27,140	34,372	72,331	99,168	108,506	64,919	83,075
Noble.....	63,110	51,209	48,870	27,140	34,372	72,331	99,168	108,506	64,919	83,075
Ottawa.....	698,869	533,020	555,057	456,174	521,377	582,246	432,195	453,961	421,276	411,975
Ottawa.....	698,869	533,020	555,057	456,174	521,377	582,246	432,195	453,961	421,276	411,975
Paulding.....	2,421,499	2,267,689	2,052,765	1,457,100	1,124,557	1,610,414	1,005,850	1,231,422	776,817	970,446
Paulding.....	2,421,499	2,267,689	2,052,765	1,457,100	1,124,557	1,610,414	1,005,850	1,231,422	776,817	970,446
Perry.....	45,863	50,714	228,623	37,182	32,048	66,286	68,368	96,994	66,364	86,554
Perry.....	45,863	50,714	228,623	37,182	32,048	66,286	68,368	96,994	66,364	86,554
Pickaway.....	13,286	33,829	41,603	17,865	68,976	145,018	233,322	320,093	66,498	86,703
Pickaway.....	13,286	33,829	41,603	17,865	68,976	145,018	233,322	320,093	66,498	86,703
Pike.....	33,601	38,646	23,539	9,004	35,414	50,482	93,048	98,207	54,473	70,347
Pike.....	33,601	38,646	23,539	9,004	35,414	50,482	93,048	98,207	54,473	70,347
Portage.....	777,755	881,074	755,828	804,770	429,076	638,231	760,382	688,278	703,471	876,080
Portage.....	777,755	881,074	755,828	804,770	429,076	638,231	760,382	688,278	703,471	876,080
Preble.....	191,241	317,697	411,718	74,513	172,261	245,392	519,980	670,320	257,269	341,292
Preble.....	191,241	317,697	411,718	74,513	172,261	245,392	519,980	670,320	257,269	341,292
Putnam.....	1,301,590	1,246,259	1,224,171	620,939	712,352	799,413	798,404	1,020,373	407,647	523,505
Putnam.....	1,301,590	1,246,259	1,224,171	620,939	712,352	799,413	798,404	1,020,373	407,647	523,505
Richland.....	728,487	897,037	958,474	745,776	576,229	862,824	921,616	1,144,392	768,134	957,873
Richland.....	728,487	897,037	958,474	745,776	576,229	862,824	921,616	1,144,392	768,134	957,873
Ross.....	30,629	28,020	21,922	12,683	32,213	55,401	98,301	114,947	43,009	66,054
Ross.....	30,629	28,020	21,922	12,683	32,213	55,401	98,301	114,947	43,009	66,054
Sandusky.....	981,055	943,532	887,738	857,738	717,665	878,308	924,205	1,127,573	706,800	813,543
Sandusky.....	981,055	943,532	887,738	857,738	717,665	878,308	924,205	1,127,573	706,800	813,543
Scioto.....	51,117	27,071	27,071	9,119	39,235	61,060	90,562	84,334	47,880	81,110
Scioto.....	51,117	27,071	27,071	9,119	39,235	61,060	90,562	84,334	47,880	81,110
Seneca.....	1,062,436	1,020,565	1,020,565	838,678	694,148	865,725	1,013,072	1,332,190	757,267	908,007
Seneca.....	1,062,436	1,020,565	1,020,565	838,678	694,148	865,725	1,013,072	1,332,190	757,267	908,007
Shelby.....	1,334,780	1,360,806	1,208,556	703,450	1,036,200	984,227	1,074,425	1,348,198	734,809	1,096,416
Shelby.....	1,334,780	1,360,806	1,208,556	703,450	1,036,200	984,227	1,074,425	1,348,198	734,809	1,096,416
Starke.....	1,038,106	1,212,655	1,121,976	1,016,566	789,260	1,107,919	1,220,528	1,201,165	1,092,982	1,377,709
Starke.....	1,038,106	1,212,655	1,121,976	1,016,566	789,260	1,107,919	1,220,528	1,201,165	1,092,982	1,377,709
Summit.....	645,322	758,949	703,709	585,609	459,006	716,528	781,642	639,708	672,890	743,263
Summit.....	645,322	758,949	703,709	585,609	459,006	716,528	781,642	639,708	672,890	743,263
Trumbull.....	983,931	809,980	582,627	360,019	375,711	518,587	734,480	547,910	783,715	846,837
Trumbull.....	983,931	809,980	582,627	360,019	375,711	518,587	734,480	547,910	783,715	846,837
Tuscarawas.....	482,027	515,771	469,239	384,575	384,575	468,915	521,605	540,594	472,234	572,315
Tuscarawas.....	482,027	515,771	469,239	384,575	384,575	468,915	521,605	540,594	472,234	572,315
Union.....	474,072	756,347	602,371	308,035	380,646	591,349	686,740	892,890	413,370	540,240
Union.....	474,072	756,347	602,371	308,035	380,646	591,349	686,740	892,890	413,370	540,240
Van Wert.....	1,766,548	1,638,839	1,543,128	956,516	1,027,956	1,010,940	974,281	1,093,015	581,858	719,871
Van Wert.....	1,766,548	1,638,839	1,543,128	956,516	1,027,956	1,010,940	974,281	1,093,015	581,858	719,871
Vinton.....	25,171	22,791	13,020	4,723	14,985	29,441	34,549	37,190	27,092	44,130
Vinton.....	25,171	22,791	13,020	4,723	14,985	29,441	34,549	37,190	27,092	44,130
Warren.....	148,720	300,943	304,844	75,362	111,232	225,157	401,553	404,563	204,297	382,713
Warren.....	148,720	300,943	304,844	75,362	111,232	225,157	401,553	404,563	204,297	382,713
Washington.....	128,018	137,871	122,409	51,038	92,183	161,534	194,788	170,838	192,043	162,786
Washington.....	128,018	137,871	122,409	51,038	92,183	161,534	194,788	170,838	192,043	162,786
Wayne.....	1,025,869	1,133,974	1,182,999	1,046,805	752,754	1,115,355	1,325,469	1,349,213	1,244,396	1,327,910
Wayne.....	1,025,869	1,133,974	1,182,999	1,046,805	752,754	1,115,355	1,325,469	1,349,213	1,244,396	1,327,910
Williams.....	897,422	1,062,663	963,983	577,651	851,440	939,548	1,048,271	1,048,271	768,187	1,106,595
Williams.....	897,422	1,062,663	963,983	577,651	851,440	939,548	1,048,271	1,048,271	768,187	1,106,595
Wood.....	2,687,139	2,390,230	2,011,057	1,892,795	1,510,906	1,932,182	1,679,192	2,280,632	1,318,463	1,507,749
Wood.....	2,687,139	2,390,230	2,011,057	1,892,795	1,510,906	1,932,182	1,679,192	2,280,632	1,318,463	1,507,749
Wyandot.....	695,010	895,493	728,615	447,692	463,820	567,307	698,969	927,655	465,312	602,003
Wyandot.....	695,010	895,493	728,615	447,692	463,820	567,307	698,969	927,655	465,312	602,003
Total product.....	48,713,292	49,834,715	49,061,678	34,363,980	33,906,233	44,179,782	49,731,954	58,312,740	37,305,993	46,780,843
Total area.....	1,458,636	1,427,383	1,581,858	1,281,805	1,420,792	1,344,247	1,449,112	1,467,052	1,213,228	1,188,947

Average area for 10 years, 1,384,500 acres.

Average product for 10 years, 45,220,021 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF CORN IN OHIO FOR THE LAST TEN YEARS.

Counties.	Bushels (Shelled).									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	639,495	740,634	947,043	854,571	972,105	935,310	799,322	833,485	650,528	908,846
Allen.....	1,506,204	1,418,960	1,636,162	1,604,028	1,546,806	1,801,800	1,500,757	1,019,187	1,082,426	1,528,880
Ashtabula.....	829,414	683,960	1,008,452	803,171	584,386	1,083,702	898,728	389,728	389,276	1,010,692
Athens.....	553,684	339,674	432,151	381,487	183,853	373,994	322,116	31,899	359,393	249,949
Auugaize.....	1,342,707	1,680,300	2,073,820	363,025	330,090	976,482	353,359	386,926	228,453	480,751
Belmont.....	610,343	680,514	858,914	1,149,990	1,788,023	2,081,420	1,852,080	1,482,875	1,647,180	1,994,731
Brown.....	1,010,868	804,687	1,189,727	699,836	546,846	829,900	1,786,283	1,763,644	963,403	1,284,480
Butler.....	2,146,137	1,915,075	2,594,356	1,415,488	2,348,512	2,416,230	2,319,632	1,987,922	1,680,633	2,183,663
Carroll.....	493,151	461,656	538,276	448,154	319,651	520,235	432,353	394,549	389,010	459,200
Champaign.....	2,161,509	2,334,141	3,228,279	2,514,735	2,318,982	2,318,982	2,553,673	2,334,679	2,081,850	2,648,516
Clark.....	1,814,192	1,752,232	2,301,038	1,808,306	2,082,526	2,013,090	1,930,147	2,196,070	1,418,098	2,361,166
Clermont.....	1,061,855	853,367	1,006,956	682,133	971,255	1,039,256	907,140	776,335	1,188,543	1,054,348
Clinton.....	2,600,295	2,633,825	2,800,688	2,242,765	2,718,403	2,736,412	2,723,870	2,375,597	1,443,153	2,692,420
Columbiana.....	559,820	581,132	661,390	541,895	478,322	759,798	688,569	427,872	655,691	630,013
Coshocton.....	846,549	683,795	1,062,295	919,950	735,535	959,608	894,949	982,280	578,336	983,068
Crawford.....	1,500,154	1,314,482	1,269,820	1,276,118	845,004	1,522,517	1,282,608	1,105,184	1,427,556	1,428,498
Cuyahoga.....	2,919,894	3,655,176	285,992	229,069	121,670	344,375	308,136	128,609	310,128	229,458
Darke.....	1,479,529	1,362,904	4,385,597	2,987,610	3,621,242	4,029,188	3,762,010	3,441,497	3,553,020	4,192,821
Defiance.....	1,417,493	1,221,107	1,297,540	1,098,047	763,178	1,533,195	1,143,221	1,312,452	1,114,482	1,199,386
Delaware.....	619,503	556,485	478,254	1,325,430	1,052,971	1,566,275	1,169,003	1,141,545	1,307,833	1,718,267
Erie.....	2,020,727	2,001,479	2,227,940	588,250	423,758	2,350,012	2,017,794	453,398	489,991	548,596
Fairfield.....	1,913,377	2,359,990	2,093,089	1,068,534	1,986,375	2,415,335	2,268,980	2,174,930	1,439,774	2,041,560
Franklin.....	2,021,515	1,814,315	2,515,537	1,814,794	1,803,178	2,475,590	2,102,845	2,251,999	1,722,803	2,848,567
Franklin.....	1,610,406	1,354,210	1,147,420	1,499,630	1,365,196	1,717,160	1,121,019	1,377,766	1,353,100	1,207,670
Gallia.....	395,969	432,167	531,593	576,817	553,974	675,766	515,120	446,887	387,901	579,839
Genesee.....	2,319,043	192,617	303,697	277,259	131,496	348,319	277,600	49,316	259,773	200,538
Greene.....	527,923	2,618,444	2,819,231	2,346,930	2,588,294	2,496,490	2,549,852	2,391,445	1,723,855	2,736,452
Guernsey.....	527,923	517,305	651,334	463,275	370,721	602,665	531,619	526,788	358,505	553,114
Hamilton.....	803,626	692,592	670,890	381,447	668,988	660,361	597,261	548,113	578,555	776,821
Hancock.....	2,342,167	2,021,856	1,898,397	1,934,647	2,027,150	1,744,353	1,932,987	1,607,571	1,897,955	2,463,238
Hardin.....	1,597,284	1,011,764	1,782,749	1,230,497	1,302,659	2,131,333	1,373,642	1,162,337	1,186,468	2,048,464
Harrison.....	449,258	480,310	540,431	424,062	289,820	527,852	410,252	360,309	279,852	511,120
Henry.....	2,648,802	2,979,235	2,401,842	2,350,492	2,350,492	2,816,366	1,886,748	2,059,519	2,283,889	2,212,582
Hocking.....	1,835,301	1,613,784	1,632,150	1,402,436	1,912,670	1,713,722	1,811,945	1,783,295	1,066,210	2,016,476
Hocking.....	2,96,238	355,126	418,199	383,129	355,190	435,549	374,701	358,615	309,986	416,146
Holmes.....	844,683	726,478	952,950	920,775	751,821	975,687	836,100	735,157	746,882	906,363
Huron.....	1,009,503	1,042,430	1,243,193	1,077,847	708,297	1,266,722	1,100,079	852,582	977,955	1,034,361
Jackson.....	260,121	405,982	381,679	321,807	312,679	294,271	296,292	261,851	334,165	333,670
Jefferson.....	394,953	366,735	476,933	399,697	312,679	461,447	411,325	377,123	348,449	487,079
Knot.....	1,111,704	969,315	1,521,545	521,770	521,650	81,620	81,536	81,512	968,379	1,178,641

Lake	220,960	180,797	310,744	202,510	113,733	249,722	177,910	102,975	167,492	126,553
Lawrence	210,253	289,493	271,045	313,015	281,445	310,210	390,885	230,036	244,571	381,178
Licking	1,722,052	1,600,384	2,011,010	1,632,012	1,433,519	1,903,736	1,575,402	1,826,852	1,521,865	1,953,426
Logan	1,651,146	1,965,098	2,138,513	1,790,313	1,886,203	2,257,061	1,863,081	1,765,760	1,444,022	2,193,723
Lorain	710,301	533,339	701,239	597,474	319,330	927,010	723,060	438,485	607,907	566,510
Lucas	1,162,237	1,077,074	1,063,333	913,834	839,512	1,012,840	706,638	1,057,301	855,166	842,660
Madison	2,927,330	2,677,672	2,901,298	2,546,300	2,435,569	2,091,910	2,086,415	2,067,487	2,197,225	3,258,890
Marion	447,632	411,405	430,115	485,313	302,500	577,791	430,723	212,568	444,144	416,063
Marron	2,101,888	1,699,971	2,140,337	1,713,740	1,475,714	1,919,699	1,758,083	1,631,619	1,455,135	2,016,466
Medina	650,722	824,125	819,279	774,475	451,179	890,193	724,606	435,209	717,854	719,753
Meigs	352,371	365,688	433,616	371,841	357,590	370,571	382,991	319,618	258,394	489,013
Mercer	1,796,322	2,018,895	2,290,835	1,900,371	1,954,909	2,154,719	2,143,040	1,740,035	1,644,644	2,036,252
Miami	2,027,967	2,299,845	3,049,238	2,022,971	2,202,837	2,483,490	2,519,873	2,130,533	1,902,533	2,742,883
Monroe	446,741	500,253	630,890	459,196	395,978	578,315	490,920	390,670	649,208	649,208
Montgomery	1,416,853	1,773,635	2,200,358	1,409,489	1,988,223	1,768,769	2,028,243	1,908,834	1,118,504	2,045,440
Morgan	478,470	469,970	576,960	450,750	414,222	603,548	580,106	496,704	391,757	590,202
Morrow	1,033,422	864,415	1,047,615	954,120	714,801	1,033,180	765,293	770,324	849,314	982,656
Muskingum	962,202	1,024,510	1,040,694	857,590	860,408	1,158,392	1,017,795	1,072,416	669,356	1,022,037
Noble	538,616	495,390	562,530	475,265	456,811	621,728	563,786	508,599	637,844	637,844
Ontario	1,145,639	937,236	834,068	775,023	750,717	1,211,237	673,581	733,524	878,627	706,809
Paulding	2,640,438	2,666,314	2,137,059	2,050,716	1,205,010	2,434,210	1,730,366	2,548,787	2,016,302	2,361,586
Perry	628,563	636,102	750,130	577,439	565,279	606,138	638,918	611,565	539,028	617,362
Pickaway	3,328,509	3,354,293	3,354,293	2,751,378	2,846,619	3,036,315	2,831,153	2,976,494	2,254,422	3,157,955
Pike	882,860	828,880	868,949	840,862	811,633	848,732	707,458	707,758	521,807	785,848
Portage	589,539	416,789	518,247	478,485	281,906	586,452	441,926	115,182	489,381	388,212
Preble	2,397,950	2,381,568	2,830,020	2,049,663	2,309,948	2,607,133	2,602,172	2,064,821	1,506,045	2,502,491
Putnam	2,012,903	2,350,049	2,670,803	2,181,757	2,081,688	3,027,680	2,318,551	1,960,480	2,481,147	3,023,122
Richland	1,012,859	954,893	1,263,095	1,033,587	780,285	1,372,314	1,023,263	854,279	945,983	1,308,236
Ross	2,431,903	2,619,764	2,816,211	2,040,939	2,540,003	3,075,678	2,234,839	2,398,009	1,732,452	2,304,574
Sandusky	1,986,358	1,630,121	1,465,218	1,635,590	1,461,185	1,673,076	1,380,767	1,202,653	1,373,728	1,474,840
Scioto	614,118	737,890	728,605	672,872	728,396	697,135	590,141	667,988	525,367	855,810
Seneca	1,910,133	1,890,857	1,499,741	1,744,090	1,695,087	2,224,279	1,837,681	1,673,541	1,657,142	1,801,515
Shelby	1,677,630	2,059,958	2,292,967	1,888,509	1,652,313	2,126,887	1,790,469	1,710,312	1,608,075	2,297,897
Stark	1,203,127	1,111,521	1,289,427	1,173,528	1,013,913	1,304,005	1,066,597	930,259	1,114,138	1,309,470
Summit	570,783	459,077	570,783	583,679	417,914	873,266	389,272	363,512	566,433	571,458
Tuscarawas	526,816	420,559	513,190	417,489	292,254	543,637	389,322	70,355	387,613	303,725
Union	691,185	678,182	776,481	684,942	591,970	816,109	661,512	647,721	560,288	781,360
Van Wert	1,903,085	2,561,403	2,104,941	1,648,181	1,331,446	2,109,584	1,533,050	1,720,799	2,229,616	2,279,998
Vinton	2,298,100	2,447,923	2,320,618	2,247,270	2,127,426	2,805,200	2,288,658	1,727,400	1,623,894	2,566,123
Warren	331,753	311,753	320,353	285,520	242,364	272,202	241,327	212,017	180,093	266,123
Washington	1,945,305	1,864,616	2,139,345	1,236,370	1,777,367	1,608,645	1,862,474	1,602,924	1,235,005	1,363,491
Wayne	556,807	631,279	642,978	528,080	519,554	609,505	566,690	554,400	451,393	727,312
Wayne	1,710,495	2,200,009	1,518,181	1,461,291	1,125,539	1,690,519	1,370,730	1,005,430	1,326,645	1,712,987
Williams	1,315,549	1,240,094	1,202,431	1,085,213	823,756	1,566,271	1,070,472	1,140,030	1,265,970	1,101,575
Wood	3,608,774	3,351,510	3,328,883	2,098,579	2,984,192	3,331,556	1,792,472	2,782,206	2,924,560	2,681,169
Wyandot	1,668,560	1,349,187	1,530,544	1,341,944	1,085,028	1,680,670	1,593,485	1,266,194	1,368,552	1,720,919
Total product.....	113,773,480	110,803,783	127,218,227	102,622,908	100,620,205	127,044,784	108,538,592	100,529,653	92,820,349	122,675,349
Total area.....	3,122,005	3,026,710	3,281,595	2,840,594	2,894,113	3,011,241	2,865,190	3,066,756	2,945,473	3,160,066

Average area for 10 years, 3,021,374 acres.

Average product for 10 years, 110,664,731 bushels.

AGRICULTURAL REPORT

COMPARATIVE TABLE SHOWING PRODUCTION OF MEADOWS IN OHIO FOR TEN YEARS.

Counties.	Tons of Hay.									
	1911.	1910.	1900.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	7,731	11,905	15,698	14,865	16,063	15,901	10,332	12,855	14,144	11,134
Allen.....	26,817	28,300	30,778	31,500	42,860	40,422	30,467	26,122	16,948	9,741
Ashtabula.....	33,006	20,338	37,132	32,761	43,109	36,012	35,761	37,957	22,308	25,904
Ashland.....	58,361	74,218	72,761	72,601	70,003	61,633	71,745	71,758	66,712	61,312
Athens.....	12,212	19,802	23,333	22,568	25,644	20,962	17,111	21,493	17,092	16,332
Auglaize.....	15,735	12,960	19,674	17,000	24,000	17,288	15,234	17,703	11,743	7,400
Belmont.....	8,010	26,726	43,522	43,338	41,823	37,204	33,518	41,307	39,009	27,668
Brown.....	10,262	13,462	21,067	16,730	22,743	11,540	15,093	16,560	19,709	11,959
Butler.....	12,131	12,022	20,856	21,080	22,143	15,563	14,754	16,309	15,354	12,865
Carroll.....	26,037	27,318	36,019	32,315	33,541	30,084	25,341	33,069	31,885	28,049
Champaign.....	15,500	12,679	16,563	18,485	20,944	14,720	9,040	14,363	11,748	7,836
Clark.....	18,131	16,856	23,015	21,375	27,325	20,357	20,243	24,060	24,548	11,926
Clermont.....	12,157	22,359	23,857	21,232	18,769	15,822	18,632	19,217	17,351	13,453
Columbiana.....	31,437	35,030	28,079	17,062	25,630	17,049	18,742	20,561	19,214	11,182
Coshocton.....	28,367	32,855	46,574	41,765	49,137	47,145	43,538	57,906	48,999	42,128
Crawford.....	25,343	36,372	40,195	37,370	47,177	37,351	30,791	37,322	31,097	31,272
Cuyahoga.....	24,801	36,259	40,195	31,637	47,418	30,350	26,961	37,322	35,532	21,036
Darke.....	16,290	27,602	20,415	26,763	32,486	26,528	29,997	34,051	35,532	35,883
Defiance.....	16,598	21,474	37,784	17,866	31,118	16,368	15,721	20,326	13,000	8,248
Delaware.....	49,065	49,065	54,513	45,519	59,631	48,894	47,997	27,827	33,935	19,772
Erle.....	10,138	7,083	11,483	11,564	15,250	17,141	24,892	27,827	42,161	33,309
Fairfield.....	28,844	40,713	45,330	42,381	58,947	43,500	10,079	15,004	9,807	8,396
Payette.....	6,793	8,685	8,417	8,664	8,106	8,617	30,065	54,053	30,809	24,097
Franklin.....	20,098	40,240	46,116	44,118	47,462	37,997	11,496	13,955	10,700	7,148
Fulton.....	19,606	15,177	23,521	25,216	25,768	17,307	41,962	43,692	38,045	25,071
Galla.....	11,036	13,537	15,544	25,216	17,248	12,952	24,942	27,964	17,387	15,089
Geauga.....	31,306	32,025	37,504	36,720	35,455	32,828	13,057	15,415	11,365	9,302
Greene.....	13,129	14,547	18,554	18,757	25,756	16,873	13,261	34,945	32,523	36,380
Guernsey.....	25,847	20,718	41,711	40,647	45,456	34,560	35,551	19,937	15,983	10,836
Hamilton.....	12,632	14,787	16,593	14,769	16,038	11,523	12,577	12,585	11,974	28,279
Hancock.....	28,307	27,210	36,751	30,653	49,456	29,507	30,241	40,158	27,845	12,069
Hardin.....	20,627	23,265	37,857	35,272	34,324	24,038	16,476	26,175	23,147	10,080
Harrison.....	20,932	30,843	37,857	35,272	42,040	38,200	36,436	39,988	30,947	30,947
Henry.....	16,929	17,807	25,392	17,320	25,406	13,448	23,063	21,264	16,414	15,431
Highland.....	13,751	24,055	25,346	22,563	26,570	17,649	20,266	26,367	20,644	15,355
Hocking.....	7,802	10,845	13,506	15,515	18,597	14,704	13,069	26,367	14,034	10,903
Holmes.....	29,570	24,164	28,380	22,387	33,838	23,846	20,153	26,807	27,708	23,056
Huron.....	31,762	34,027	42,994	38,589	44,235	31,508	34,528	26,807	42,546	27,458
Jackson.....	15,129	12,230	15,432	15,583	18,726	10,100	11,887	13,702	13,876	9,035
Jefferson.....	16,014	23,333	33,830	32,773	30,166	31,156	26,937	31,053	31,841	25,490
Knox.....	33,645	30,499	43,082	63,627	63,679	45,778	45,718	45,515	45,806	29,673

CROP AND OTHER STATISTICS

Lake	10,520	17,800	17,945	15,850	13,064	17,300	18,105	17,390	14,834
Lawrence	5,764	6,325	7,887	7,022	4,451	4,488	5,435	4,533	7,901
Licking	53,045	98,313	64,502	70,608	91,306	5,984	67,790	74,794	65,800
Logan	18,534	20,086	22,235	73,123	16,036	16,300	16,984	18,984	10,321
Lorain	47,257	53,563	49,547	44,688	42,854	47,824	50,740	50,740	47,155
Lucas	15,611	17,062	15,444	13,337	17,744	16,689	17,744	15,721	11,841
Madison	21,063	21,080	18,862	21,456	10,738	13,901	17,774	17,883	8,140
Maion	30,174	43,042	46,483	51,847	32,478	44,365	50,582	40,502	16,937
Marion	21,738	28,907	30,758	30,758	19,745	21,751	23,578	11,126	11,126
Medina	42,843	44,559	39,111	39,111	18,266	33,944	40,161	33,948	33,948
Meigs	12,180	22,090	21,600	21,103	18,266	16,235	18,312	18,312	18,312
Mercer	16,174	19,887	19,887	27,674	16,970	18,506	21,541	18,104	8,884
Miami	12,197	19,306	19,535	28,115	11,750	11,416	8,487	8,487	6,919
Montgomery	14,882	30,978	33,862	36,231	28,600	24,312	30,698	25,380	16,937
Monroe	15,671	26,197	22,805	23,009	19,545	17,102	20,729	25,380	16,937
Morgan	31,213	29,018	39,229	39,229	29,332	27,501	26,706	30,218	17,385
Morrow	34,747	40,860	37,792	43,220	41,812	32,884	41,284	36,052	37,703
Muskingum	47,420	47,759	54,006	54,006	46,195	44,415	50,500	44,415	37,703
Noble	27,420	35,187	35,015	39,603	20,969	20,969	36,160	31,671	14,824
Ottawa	18,591	24,953	20,381	20,754	16,260	18,465	19,684	21,014	16,529
Paulding	32,294	30,891	30,153	17,768	28,201	21,523	28,201	21,523	10,557
Perry	25,065	33,276	33,276	33,276	21,355	20,351	29,351	12,987	6,814
Pickaway	18,311	18,562	23,406	15,018	15,018	12,698	14,852	12,698	8,110
Pike	8,665	0,306	8,758	8,758	8,165	8,165	8,165	9,510	4,463
Portage	36,996	34,179	39,520	35,771	33,521	33,521	43,431	37,872	39,020
Preble	7,301	12,389	7,850	13,186	8,858	5,501	8,858	7,403	4,875
Putnam	19,638	26,442	34,506	21,282	25,451	29,999	20,855	15,761	15,761
Richland	20,262	35,254	41,683	30,968	37,252	36,996	33,675	27,641	27,641
Ross	16,053	14,809	19,139	13,868	13,868	14,757	12,266	8,187	17,834
Sandusky	19,137	23,941	25,241	17,588	18,308	25,874	27,110	17,834	17,834
Seneca	11,148	20,242	13,186	7,981	9,368	12,009	9,190	9,125	15,122
Shelby	40,497	31,922	46,231	20,186	26,602	40,812	28,506	15,122	15,122
Stark	21,509	15,104	21,399	10,753	9,063	14,731	8,084	6,750	52,701
Summit	61,537	62,114	64,489	54,180	64,724	62,950	64,724	52,701	52,701
Tuscarawas	31,169	28,878	30,924	58,803	26,814	34,109	33,391	32,178	32,178
Trumbull	64,074	68,070	67,870	58,803	62,744	63,919	61,764	61,764	61,764
Union	46,808	43,032	52,560	45,418	41,613	43,132	54,015	54,015	54,015

Average area for 10 years, 2,120,588 acres.
Average product for 10 years, 2,384,335 tons.

AGRICULTURAL REPORT

COMPARATIVE TABLE SHOWING PRODUCTION OF CLOVER IN OHIO FOR TEN YEARS.

Counties.	Tons of Hay.									
	1911	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	2,746	5,343	1,827	4,087	1,188	1,618	5,491	3,241	5,350	5,390
Allen.....	1,955	17,557	9,635	21,253	1,706	4,395	15,409	12,292	22,222	21,341
Ashtabula.....	10,360	28,790	19,055	24,927	13,012	11,484	18,873	19,121	19,121	21,039
Athens.....	624	5,013	811	2,701	634	680	3,573	1,095	1,747	2,195
Aurora.....	543	836	414	575	219	377	1,461	1,241	1,930	2,813
Ashtabula.....	5,957	21,982	10,773	20,701	1,750	4,432	20,381	16,756	22,098	16,683
Belmont.....	3,529	5,910	1,319	3,890	883	1,226	6,376	1,368	1,997	1,897
Brown.....	1,115	2,116	704	1,912	1,717	258	1,753	1,398	2,623	5,142
Batler.....	7,725	17,226	2,512	16,078	7,078	5,815	17,571	14,389	14,389	15,740
Carroll.....	2,650	8,206	1,385	4,678	2,300	3,832	6,302	1,208	18,915	15,740
Champaign.....	13,875	29,529	8,182	21,875	2,962	6,185	23,863	14,246	18,931	2,555
Clark.....	10,812	18,310	4,537	14,878	244	3,107	19,804	14,449	18,931	18,297
Clermont.....	1,890	3,316	912	3,153	881	3,295	4,280	3,443	14,783	14,783
Clinton.....	8,140	6,105	2,240	10,582	775	3,073	12,592	5,770	9,192	8,253
Columbiana.....	8,140	14,750	4,866	10,734	8,722	4,905	10,317	5,101	3,842	7,787
Coshocton.....	5,883	18,128	5,310	11,822	5,084	7,649	12,240	3,823	4,269	8,791
Crawford.....	9,822	26,702	21,037	29,607	8,184	11,197	25,723	14,340	19,273	12,461
Cuyahoga.....	1,310	4,210	1,312	3,276	1,361	808	2,675	1,086	2,178	2,472
Darke.....	21,182	38,964	9,482	36,780	1,374	11,572	39,947	31,721	35,011	30,979
Defiance.....	2,338	20,015	4,820	22,239	6,811	3,688	22,869	4,893	22,627	19,079
Delaware.....	9,929	17,378	9,576	12,652	1,403	2,408	14,953	8,336	10,700	18,875
Eric.....	5,167	11,621	6,631	8,432	1,947	3,270	9,178	3,638	7,827	17,571
Fairfield.....	9,989	16,422	6,406	15,686	2,048	5,610	26,758	12,848	13,776	17,644
Payette.....	4,611	8,414	1,759	5,961	1,331	2,130	11,274	8,037	9,830	6,438
Franklin.....	6,898	14,664	5,093	10,318	674	2,391	16,368	8,868	9,221	12,555
Fulton.....	3,761	19,619	12,810	20,815	10,453	9,636	21,585	1,245	23,772	21,345
Galla.....	800	576	227	419	266	428	2,119	1,053	2,339	2,303
Geauga.....	460	4,895	1,113	3,672	928	1,716	3,330	722	1,596	2,789
Greene.....	9,232	13,305	6,440	15,149	721	3,381	18,079	10,732	13,139	13,503
Guernsey.....	1,077	5,732	607	1,867	386	515	4,459	497	1,080	2,442
Hamilton.....	3,241	779	779	1,153	721	2,201	5,879	5,610	6,182	6,096
Hancock.....	4,115	26,164	20,648	32,345	4,136	6,592	25,868	17,881	27,826	34,324
Hardin.....	2,677	17,464	7,741	11,271	3,348	3,942	20,048	12,559	14,376	20,554
Harrison.....	1,372	4,336	758	1,861	188	914	2,534	519	1,581	1,685
Henry.....	3,952	15,094	6,344	21,490	2,905	2,138	15,695	4,945	20,609	15,233
Highland.....	3,733	5,014	3,418	5,529	1,652	2,165	9,801	6,795	11,038	7,623
Hocking.....	457	2,924	270	1,285	415	750	4,180	2,105	3,204	2,011
Holmes.....	18,345	19,374	10,981	18,870	8,872	14,827	17,032	8,663	17,032	1,038
Huron.....	17,024	32,214	25,185	31,022	15,016	17,160	28,152	14,947	19,801	22,549
Jackson.....	774	1,081	169	374	169	32	212	101	219	291

Jefferson.....	2,821	6,103	802	5,140	1,788	2,024	0,701	2,165	1,158	5,800
Knox.....	7,326	26,788	14,041	6,774	6,704	6,073	6,953	6,916	6,970	11,281
Lake.....	436	1,734	235	1,110	222	376	1,066	201	945	1,171
Lawrence.....	218	387	253	353	269	168	708	767	758	822
Licking.....	9,701	22,897	6,407	15,783	3,529	5,977	20,250	9,837	6,583	14,860
Logan.....	16,398	28,655	10,095	29,825	9,909	7,978	25,748	15,474	23,448	21,079
Lorain.....	8,108	18,680	14,729	17,096	7,704	9,795	14,312	5,858	8,872	10,598
Lucas.....	3,919	7,820	4,593	5,982	3,283	2,729	5,017	946	5,236	6,021
Madison.....	9,543	21,603	3,975	12,207	1,183	4,679	18,922	11,880	12,827	8,912
Madison.....	3,384	7,815	2,648	7,258	4,161	2,371	7,640	3,037	4,114	8,250
Marion.....	8,227	28,955	9,623	20,179	3,728	8,930	22,995	14,062	15,339	18,968
Medina.....	13,457	10,137	19,714	21,733	13,235	11,942	21,170	11,856	23,694	16,297
Meigs.....	592	1,388	674	603	458	409	1,772	1,035	2,634	3,237
Mercer.....	6,853	30,026	9,334	29,502	847	7,857	27,121	25,956	22,965	22,965
Miami.....	10,669	16,008	4,113	11,758	1,450	4,730	24,505	16,206	14,888	14,150
Monroe.....	599	2,957	486	634	206	604	2,163	487	583	1,663
Montgomery.....	7,097	18,460	2,395	9,833	1,352	4,197	17,635	14,984	15,490	14,411
Morgan.....	2,592	6,940	1,448	3,717	714	1,210	4,314	2,064	2,709	5,311
Morrow.....	13,223	23,424	14,844	22,370	7,745	8,236	20,440	11,247	15,360	24,695
Muskingum.....	3,153	11,800	1,973	6,428	2,604	2,708	9,878	2,552	3,792	7,838
Noble.....	1,914	3,465	365	2,100	390	1,032	4,190	881	1,103	3,039
Ottawa.....	2,159	7,988	5,520	8,555	3,160	3,716	6,194	4,296	7,798	10,639
Paulding.....	3,574	17,358	2,422	17,003	2,070	2,854	17,059	5,548	16,610	8,540
Perry.....	4,787	12,508	2,403	7,962	3,308	6,135	12,115	3,850	4,981	9,061
Pickaway.....	7,770	14,208	4,381	10,382	1,896	3,657	13,000	9,791	11,674	9,061
Pike.....	1,977	3,666	4,381	2,782	671	1,376	7,073	2,507	3,524	2,616
Portage.....	12,451	12,325	1,876	9,378	4,086	5,315	11,270	3,765	7,326	7,310
Preble.....	3,071	21,182	6,210	20,703	4,988	7,476	17,027	18,940	19,244	15,244
Putnam.....	16,429	17,665	13,164	23,869	3,013	6,302	19,931	9,007	22,786	19,210
Richland.....	4,909	20,896	20,824	27,599	14,639	18,534	27,759	18,172	18,737	19,290
Ross.....	5,555	5,555	3,142	6,842	760	1,483	8,698	6,728	11,009	8,022
Sandusky.....	10,302	14,689	9,872	13,954	3,006	4,894	17,670	4,046	13,251	14,255
Scioto.....	837	1,957	698	1,179	668	703	1,833	1,363	2,051	2,594
Seneca.....	12,338	37,898	20,820	36,844	9,222	11,479	32,546	20,729	30,897	35,130
Shelby.....	8,726	18,954	4,945	19,397	328	3,403	18,838	18,838	20,150	18,684
Shelby.....	10,840	24,235	6,219	15,506	9,472	11,947	20,562	8,971	12,604	15,008
Stark.....	9,270	13,481	6,234	11,172	7,153	6,843	13,946	4,755	6,557	5,991
Summit.....	1,338	3,331	796	1,688	643	466	2,768	590	2,145	3,278
Trembulla.....	4,331	10,745	3,397	6,107	3,084	5,184	9,741	2,405	2,374	4,268
Tuscarawas.....	12,167	34,927	15,394	21,380	1,777	7,024	20,994	15,548	19,098	23,326
Union.....	5,108	23,585	5,290	23,307	646	3,414	26,431	8,627	21,072	18,465
Van Wert.....	225	989	143	2,433	73	136	347	347	440	491
Vinton.....	3,753	11,555	2,300	9,712	3,309	2,371	11,127	7,247	9,771	9,246
Warren.....	1,202	3,260	718	2,293	593	1,199	852	2,052	2,190	3,263
Washington.....	33,456	46,443	35,031	39,635	21,445	24,725	37,076	19,400	21,892	21,405
Wayne.....	4,723	16,423	7,673	21,187	10,241	7,847	24,355	3,650	22,713	19,588
Williams.....	8,425	21,755	9,891	21,922	2,341	5,115	18,593	5,989	18,957	17,070
Wood.....	7,771	24,274	14,081	28,066	2,722	5,074	18,459	15,462	18,151	23,457
Wyandot.....										
Total product.....	555,261	1,285,284	565,322	1,132,515	293,524	425,507	1,219,405	666,997	972,580	1,026,948

Average product for 10 years, 814,334 tons.

COMPARATIVE TABLE SHOWING PRODUCTION OF CLOVER SEED IN OHIO FOR TEN YEARS.

Counties.	Bushels of Seed.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	870	295	270	3,735	568	583	1,459	2,535	2,535	7,905
Allen.....	446	2,691	2,910	20,693	986	2,549	3,403	2,175	5,825	7,831
Ashland.....	563	3,132	2,215	8,190	1,369	1,764	227	2,339	4,648	4,111
Ashtabula.....	13	281	15	368	56	56	131	68	138	174
Attica.....	14	6,345	5,153.9	94	400	2,748	59	28	62	174
Auagize.....	1,644	62	48	21,107	38	60	6,065	0,943	9,397	14,580
Belmont.....	19	386	92	1,901	38	230	1,384	165	192	1,710
Brown.....	175	386	142	7,077	251	2,081	569	837	388	2,639
Butler.....	2,166	3,409	142	11,095	257	2,081	2,311	4,813	5,298	7,948
Carroll.....	367	6,298	12	2,984	298	1,273	2,619	258	498	1,318
Champaign.....	3,590	6,048	1,746	20,123	123	2,340	4,993	6,682	7,410	9,319
Clark.....	1,556	2,139	285	12,432	83	183	3,722	5,456	3,614	3,381
Clermont.....	91	27	37	12,218	83	151	311	431	553	1,371
Clinton.....	2,524	908	330	12,121	222	702	3,648	3,681	5,260	2,601
Columbiana.....	181	832	192	2,081	586	383	1,616	1,190	1,619	935
Coshocton.....	217	1,229	868	9,902	1,107	2,373	4,024	1,495	5,650	5,650
Crawford.....	1,725	4,724	3,532	13,810	3,347	2,693	4,626	3,843	8,300	6,031
Cuyahoga.....	38	25	2	82	2		47	60	21	21
Darke.....	4,208	7,291	1,099	26,991	413	4,514	6,399	11,834	12,936	18,783
Delaware.....	3,655	4,108	3,343	21,707	3,779	5,865	8,061	4,348	12,594	6,578
Delaware.....	603	806	1,206	12,607	384	474	1,826	1,811	2,772	4,941
Erie.....	810	1,746	806	4,120	572	130	1,231	479	1,564	1,461
Fairfield.....	2,701	2,361	2,614	21,820	1,069	1,542	9,080	7,204	6,725	11,544
Fayette.....	1,653	1,315	227	6,062	147	599	3,489	5,032	5,499	3,212
Franklin.....	1,290	2,284	717	11,702	121	213	5,133	4,508	3,490	4,310
Fulton.....	2,262	3,080	4,581	13,134	3,539	5,118	6,188	744	6,171	3,762
Gallia.....	50	6	45	12			31	40	165	279
Geauga.....	15	74	30	14,968	152	991	145	5	17	46
Greene.....	2,077	2,297	565	14,968	152	991	4,773	7,026	5,794	8,182
Guernsey.....	189	109	56	1,109	27	34	803	32	401	1,089
Hamilton.....	461	1,164	134	1,445	2,357	2,803	4,201	5,248	8,528	11,867
Hancock.....	1,778	4,283	5,295	20,226	24	172	437	1,344	1,712	1,867
Hardin.....	1,059	2,514	3,183	11,781	1,507	1,501	3,983	4,293	5,875	8,710
Harrison.....	91	283	50	1,774	36	158	1,071	143	804	804
Henry.....	3,797	8,536	6,863	21,877	3,483	6,929	8,375	3,588	12,006	7,711
Highland.....	4,965	1,327	2,585	11,402	1,777	1,424	4,861	9,240	10,390	10,390
Hocking.....	370	332	95	941	126	198	1,067	580	637	2,386
Holmes.....	1,451	3,447	3,184	9,907	2,504	4,571	5,325	2,927	3,322	5,612
Huron.....	1,852	5,906	4,442	12,118	2,640	1,534	4,347	2,537	5,253	4,049
Jackson.....	545	2		14	13			15		15

Jefferson.....	177	244	52	3,302	145	558	2,652	359	198	1,680
Knox.....	148	1,789	1,619	1,329	1,286	1,982	1,939	1,011	2,363	4,457
Lake.....	24	108	8	144		5	104	59	13	84
Lawrence.....					653	1,426	5,257	4,038	2,798	6,490
Licking.....	453	1,591	1,289	17,118	123	3,436	5,623	5,864	10,338	15,994
Logan.....	2,931	4,929	2,558	21,673	252	70	2,206	869	865	798
Lorain.....	113	647	470	1,464	1,224	2,166	2,206	7,943	2,806	3,513
Lucas.....	2,293	3,600	1,901	5,124	38	1,245	5,982	78	5,097	3,870
Madison.....	3,541	5,203	1,272	16,826	288	99	3,352	4,640	3,25	2,70
Madisoning.....	90	269	173	1,280	872	3,078	3,352	883	5,447	4,016
Marion.....	266	4,103	2,077	17,178	1,175	405	1,782	70	3,949	2,074
Medina.....	567	1,601	2,049	5,592	112	1	52	138	12,820	22,112
Meigs.....	1	15	2	112	73	7,482	9,722	9,093	4,752	6,492
Mercer.....	3,050	14,102	6,166	26,844	594	982	2,605	4,752	1,170	935
Miami.....	1,665	2,201	320	9,273	93	1,491	3,369	6,234	2,467	2,467
Monroe.....	64	72	51	5,711	442	93	2,206	1,970	3,879	3,218
Montgomery.....	3,464	3,584	289	5,711	36	2,577	2,206	154	1,799	3,989
Morgan.....	256	190	35	1,217	971	244	1,712	55	1,305	1,160
Morrow.....	647	2,486	2,036	12,994	85	204	889	748	6,851	3,529
Muskingum.....	215	240	30	2,414	172	1,785	2,668	2,226	1,603	5,430
Noble.....	176	14		918	429	477	5,544	2,433	8,228	7,570
Ottawa.....	1,598	1,050	1,166	3,183	1,002	2,040	5,055	1,611	1,380	3,303
Paulding.....	3,439	6,117	1,627	17,616	1,100	4,780	3,041	5,961	7,747	7,747
Perry.....	1,926	1,804	688	10,303	1,002	2,003	6,110	3,844	9,834	8,152
Pickaway.....	2,198	3,402	1,070	13,616	1,220	1,670	3,352	2,496	6,631	4,429
Pike.....	809	629	565	2,966	431	667	3,520	5,828	11,133	6,650
Portage.....	266	64	64	2,088	409	1,554	4,658	1,611	2,385	3,776
Preble.....	4,239	5,287	547	11,088	637	2,143	840	252	410	1,152
Putnam.....	3,959	7,039	6,575	24,630	1,907	7,003	11,167	8,444	10,948	17,645
Richland.....	1,462	5,421	4,637	14,441	2,793	2,903	5,533	10,635	2,438	2,517
Ross.....	1,806	1,689	2,866	10,383	667	769	1,645	1,017	1,223	635
Sandusky.....	3,626	3,171	2,029	9,212	721	1,554	765	240	1,223	635
Scioto.....	69	104	5	312	95	20	70	17	122	101
Seneca.....	5,839	10,948	8,165	26,240	2,791	4,209	11,167	8,444	10,948	17,645
Shelby.....	2,050	5,587	2,919	14,000	1,266	2,092	5,533	10,635	2,438	2,517
Stark.....	371	1,902	5,725	1,099	1,099	1,850	1,645	1,017	1,223	635
Summit.....	274	1,608	102	2,242	148	414	765	240	1,223	635
Trumbull.....	12	301	22	263	17	13	232	17	122	101
Tuscarawas.....	274	1,246	784	4,921	1,118	2,128	3,457	805	726	3,084
Union.....	905	2,243	1,605	17,776	483	1,172	2,745	3,442	4,154	6,873
Van Wert.....	2,383	10,293	2,973	18,613	437	2,923	4,259	2,701	6,371	4,514
Vinton.....	30	6		63	3	75	37	79	361	361
Warren.....	379	711	117	2,106	29	190	1,160	1,706	2,064	3,512
Washington.....	128	200	45	968	76	228	484	118	2,243	1,849
Wayne.....	1,865	5,460	2,986	10,815	3,713	2,690	3,141	2,776	5,538	4,948
Willis.....	2,833	5,025	6,193	18,668	4,987	6,483	9,075	2,489	13,813	8,710
Wood.....	11,168	12,534	6,139	22,357	1,264	5,229	6,116	2,172	6,149	4,109
Wyandot.....	1,521	5,387	5,083	19,343	1,328	2,434	4,928	5,070	8,154	6,537
Total product.....	127,688	234,418	141,349	805,974	71,911	145,735	266,240	241,514	335,272	420,985

Average product for 10 years, 270.109 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF IRISH POTATOES IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	7,491	35,461	31,071	15,156	20,008	21,568	16,301	28,591	18,814	23,524
Allen.....	50,403	74,726	51,748	60,023	42,704	66,441	55,789	63,446	43,546	79,705
Ashtabula.....	68,315	94,424	107,570	90,934	82,437	141,591	94,595	83,163	91,416	111,043
Ashtabula.....	342,194	362,552	400,521	291,879	219,091	435,815	308,568	340,247	207,207	204,586
Athens.....	22,426	49,142	55,409	34,969	46,375	44,530	43,975	46,527	19,399	33,860
Auglaize.....	67,339	75,860	70,448	171,438	67,695	67,988	72,816	67,492	71,778	107,039
Belmont.....	31,626	80,294	107,344	86,739	91,587	111,574	123,529	131,524	97,609	105,387
Brown.....	12,675	18,675	40,717	16,577	12,694	115,107	35,989	34,910	19,874	33,832
Butler.....	18,947	86,569	115,851	52,322	110,091	116,107	134,039	98,665	72,445	80,490
Carroll.....	56,680	71,108	106,324	66,039	67,755	86,753	61,187	46,457	42,132	51,167
Champaign.....	32,582	50,369	51,904	32,861	30,732	43,645	37,805	46,953	23,795	48,408
Clark.....	62,191	117,294	98,793	87,750	86,763	82,191	76,352	85,509	46,584	73,994
Clermont.....	46,317	63,101	98,793	32,022	71,446	76,440	76,138	65,475	54,149	75,403
Columbiana.....	7,389	10,227	16,134	14,009	26,326	33,596	221,401	203,859	18,402	34,737
Crawford.....	27,892	306,269	339,379	260,053	271,205	281,376	116,030	233,859	201,655	350,709
Crawford.....	67,750	101,744	121,062	107,833	157,223	143,738	130,104	143,150	138,725	105,193
Cuyahoga.....	136,925	135,491	119,449	133,037	123,366	172,067	601,089	605,801	80,069	102,589
Cuyahoga.....	578,816	575,715	750,187	484,060	474,309	675,134	601,089	605,801	641,831	467,748
Darke.....	86,537	119,611	137,371	68,779	74,311	74,437	96,359	143,318	85,186	130,244
Defiance.....	50,733	80,728	62,981	50,123	58,824	81,315	73,350	112,841	79,805	92,443
Delaware.....	45,339	45,339	50,123	315,155	48,465	64,521	55,009	45,978	34,150	53,105
Defiance.....	32,080	470,810	63,173	63,173	333,322	403,075	315,409	355,010	275,080	263,407
Fairfield.....	37,001	90,264	88,118	63,173	80,582	92,933	91,575	110,019	98,258	104,047
Fayette.....	716	955	995	769	580	535	1,410	13,143	2,832	7,280
Franklin.....	113,799	156,422	223,178	128,538	131,783	208,750	249,705	271,212	155,867	125,206
Fulton.....	56,372	117,267	124,216	88,852	97,499	108,998	74,389	159,291	102,158	97,312
Gallia.....	5,713	26,345	32,713	24,030	27,189	27,635	23,153	26,372	15,309	21,493
Geauga.....	289,778	258,017	332,678	247,332	219,631	374,696	254,350	231,975	187,475	163,721
Greene.....	60,340	88,124	105,581	56,302	70,561	80,510	83,716	73,965	39,612	63,389
Guernsey.....	13,292	43,705	54,673	43,386	40,369	62,976	66,849	56,947	43,537	52,955
Hamilton.....	303,705	443,586	498,250	219,444	453,323	483,697	402,830	394,966	367,060	370,706
Hancock.....	68,854	83,032	56,741	81,623	80,128	80,904	57,600	81,234	90,650	121,361
Hardin.....	93,308	88,367	68,464	77,616	108,026	104,832	83,464	60,707	144,427	167,685
Harrison.....	11,569	19,240	22,912	4,165	15,954	30,181	26,492	31,105	19,206	34,353
Henry.....	35,673	72,639	74,100	69,674	70,671	73,737	55,195	103,683	70,510	84,677
Hocking.....	3,281	8,770	21,633	3,400	9,675	14,824	17,046	20,984	12,636	23,470
Hocking.....	32,539	49,711	61,830	48,541	48,953	59,831	57,757	61,362	46,804	66,475
Holmes.....	77,919	88,512	118,269	82,457	73,920	72,149	59,006	72,586	66,970	84,198
Huron.....	158,133	190,966	153,760	117,919	119,945	143,076	122,472	125,366	133,374	123,676
Jackson.....	8,811	34,244	30,736	18,927	20,567	14,120	14,350	21,935	19,378	19,706
Jefferson.....	30,977	61,944	86,608	83,250	40,859	96,931	91,050	75,811	64,033	71,252
Knox.....	56,254	73,322	136,514	23,553	22,980	43,378	43,328	43,111	44,372	55,976

Lake.....	156,444	160,790	200,206	129,953	147,055	186,942	164,945	181,996	151,291	108,220
Lawrence.....	10,995	51,490	67,968	42,678	42,968	136,520	41,238	58,705	97,739	38,059
Locking.....	66,774	118,885	127,064	136,384	140,572	175,259	128,473	138,705	100,559	116,580
Lorain.....	40,290	37,006	55,025	127,034	44,128	51,314	38,526	47,748	32,831	100,591
Lucas.....	318,008	336,583	347,940	247,702	175,289	319,405	264,288	222,569	214,945	188,069
Madison.....	279,069	383,561	390,340	299,541	358,335	324,558	238,499	250,230	271,991	296,545
Mahoning.....	23,475	11,004	32,598	8,260	15,236	23,510	23,918	23,788	12,743	13,091
Marion.....	285,633	314,873	314,873	293,862	289,397	301,545	234,002	247,878	325,131	209,042
Medina.....	71,856	76,192	64,644	96,542	96,542	87,981	74,102	76,563	53,373	94,012
Meigs.....	441,658	465,331	352,910	352,910	515,920	435,048	305,470	309,560	299,437	268,279
Mercer.....	91,314	97,854	63,104	68,887	65,465	54,519	54,519	65,283	54,519	64,462
Miami.....	37,515	46,547	39,411	39,411	61,563	54,043	64,506	64,506	52,150	84,502
Monroe.....	145,093	148,617	73,505	85,349	85,349	94,104	109,613	120,976	52,816	98,830
Morgan.....	73,866	141,180	105,466	99,573	105,466	98,689	131,681	150,200	114,965	139,953
Montgomery.....	32,040	70,982	46,935	65,262	65,262	88,180	130,011	126,412	59,761	100,646
Morrow.....	40,584	56,125	36,371	123,931	106,169	128,417	55,555	51,403	37,339	52,420
Muskingum.....	82,044	88,043	126,317	78,082	97,079	124,174	68,605	96,175	85,524	110,956
Noble.....	52,374	62,148	46,440	41,686	41,686	48,186	69,905	72,237	92,066	97,350
Ottawa.....	18,982	50,087	43,820	43,820	43,820	28,830	37,535	63,048	59,902	79,589
Paulding.....	49,179	27,605	22,277	22,277	22,277	28,830	22,028	55,952	42,460	47,156
Perry.....	13,543	31,350	33,291	26,695	26,695	34,020	35,845	32,243	33,629	56,666
Pickaway.....	30,272	63,949	58,002	43,140	44,635	74,931	38,246	57,935	35,168	66,428
Pike.....	10,067	52,706	937,122	737,256	667,184	940,496	623,024	765,851	690,889	601,581
Portage.....	747,278	34,713	40,899	16,619	17,499	26,345	32,332	51,950	23,067	40,049
Preble.....	16,196	34,713	40,899	16,619	17,499	26,345	32,332	51,950	23,067	40,049
Putnam.....	50,385	84,509	96,036	113,832	109,095	91,375	40,930	87,891	88,075	124,854
Richland.....	214,253	220,688	242,906	233,638	199,095	214,969	183,145	186,016	162,370	186,396
Ross.....	45,576	75,693	93,349	52,650	67,638	97,527	83,028	87,431	59,262	76,828
Sandusky.....	223,079	290,976	278,555	237,653	254,855	250,988	218,237	219,977	213,943	170,052
Scioto.....	77,814	134,305	151,510	132,084	108,627	125,605	100,253	119,130	81,797	101,590
Seneca.....	167,202	245,714	185,877	140,093	189,339	209,684	178,487	196,754	150,480	164,878
Shelby.....	55,715	69,317	82,318	56,299	48,884	47,314	41,812	65,982	44,376	85,035
Stark.....	373,186	475,367	573,140	498,140	448,809	586,243	338,903	407,912	361,289	404,152
Summit.....	372,094	446,504	539,770	412,006	335,579	556,923	354,881	338,860	300,805	244,840
Trumbull.....	260,231	294,606	376,544	308,441	211,617	387,126	327,592	326,023	287,837	222,976
Tuscarawas.....	124,743	182,802	201,287	161,748	179,842	216,746	245,152	25,152	145,104	188,196
Union.....	9,597	17,556	29,953	13,475	9,655	25,393	21,491	29,040	14,576	26,646
Van Wert.....	53,395	83,610	59,375	70,669	55,315	63,003	61,528	65,778	41,852	80,840
Vinton.....	15,678	29,881	37,188	26,471	26,471	24,765	18,934	18,885	22,139	33,144
Warren.....	20,808	35,200	35,200	12,065	19,485	15,537	32,863	32,547	24,487	27,175
Washington.....	86,047	186,730	196,619	156,346	192,241	191,621	192,116	202,615	143,250	140,752
Wayne.....	405,249	515,073	1,416,865	597,356	574,255	885,520	495,229	500,178	439,791	385,049
Williams.....	40,889	52,801	52,801	45,510	51,879	76,502	53,709	102,841	75,025	81,008
Wood.....	119,493	111,748	86,610	102,120	98,587	94,342	79,014	135,547	119,026	78,592
Wyandot.....	44,746	57,714	45,451	47,960	39,729	51,915	54,993	63,472	57,980	84,982
Total product.....	9,409,212	12,313,622	14,511,973	10,555,238	10,825,659	13,615,184	10,957,796	11,998,075	9,997,543	10,507,822
Total area.....	146,144	144,916	151,611	134,667	125,737	126,683	131,338	124,826	109,811	113,064

Average area for 10 years, 130,880 acres.
Average product for 10 years, 18,469,212 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF TOBACCO IN OHIO FOR TEN YEARS.

Counties.	Pounds of Tobacco.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	2,862,240	5,249,724	6,318,401	2,317,750	3,074,552	3,173,664	2,822,122	2,604,520	1,681,640	2,465,940
Allen.....					79					
Ash and.....			14			204				
Ashtabula.....	1,870	1,900	800	1,075						
Athens.....		15,550	5,500	4,300	7,100	9,050	3,000		3,800	8,390
Auglaize.....	5,051	15,550	5,500	4,300	7,100	9,050	3,000		3,800	8,390
Belmont.....	933,511	1,194,008	1,057,466	709,945	634,026	1,020,054	1,343,499	875,315	823,282	1,055,562
Brown.....	4,204,168	4,840,185	6,628,544	484,965	4,898,925	4,533,217	3,920,895	4,619,448	4,237,990	4,527,058
Butler.....	779,064	981,371	1,162,027	679,990	1,185,850	1,548,480	1,227,730	1,058,770	735,100	422,430
Carroll.....				11						
Champaign.....	54,700	68,050	58,700	69,000	87,490	61,100	36,922	35,200	33,400	53,780
Clark.....	125,582	123,260	190,455	180,000	198,650	187,476	121,622	199,000	113,450	232,890
Clermont.....	1,980,455	2,810,745	3,456,267	232,320	2,030,640	2,177,557	1,950,645	1,998,301	1,897,956	2,086,778
Clinton.....	46	13,400	12,270	6,650	17,000	7,000	10,400	9,900	17,700	18,450
Columbiana.....				2,120						
Coshocton.....			200			100			1,000	1,500
Crawford.....		50								
Cuyahoga.....	16,230,424	15,424,356	132	12,463,334	13,669,460	15,370,410	11,809,097	9,301,531	8,712,814	8,200
Darke.....		2,400	14,867,415						1,500	500
Delaware.....										
DeWitt.....			90							
Franklin.....	500	600								
Fayette.....	729									
Fulton.....			705							
Gallia.....	1,539,692	2,280,161	2,327,222	837,305	570,930	3,000		700	30,000	1,100
Geauga.....						400,208	662,790	366,520	360,160	436,766
Greene.....	199,950	223,580	322,690	261,705	627,908	539,825	454,235	343,405	176,048	403,058
Guernsey.....	162,640	448,595	352,135	100,870	109,400	219,965	287,367	138,795	163,848	144,560
Hamilton.....	398,260	440,889	906,155	20,144	186,945	217,070	231,600	132,337	119,000	124,700
Hancock.....										
Hardin.....										
Harrison.....	3,500	3								
Henry.....					1,665					
Highland.....	62,115	161,940	175,420	21,845	20,506	19,885	6,000	4,000	10,000	2,400
Hocking.....										
Holmes.....			50							
Huron.....					73					
Jackson.....		13,690	6,500							
Jefferson.....	11,875									
Knox.....										

Lake	17,800	5,700	4,500	800	2,730	2,500	2,000	4,000	3,000	25
Lawrence	307,580	949,970	751,765	159,488	64,780	65,140	89,942	48,368	63,703	54,550
Licking										
Logan	89	51,970	32,590	24,300	1,000	3,800	173		50	
Loran	200		2,000	1,000	26,859		25,912	32		200
Lucas				1,400						
Madison										
Manitowish										
Marion	108,200	800	111,376	155,135	107	259,320	163,487	2,500	165,500	241,680
Medina	52,980	87,070	26,760	19,400	126,867		15,800	146,620	800	7,000
Meigs	22,130	82,510	12,400	5,221,470	35,100	36,400	5,347,080	6,164	8,200	24,000
Mercer	6,081,235	5,767,981	6,521,943	5,221,470	5,166,410	7,344,086	5,347,080	3,894,770	3,211,634	3,816,515
Miami	1,493,045	2,190,985	1,911,413	444,019	604,685	851,790	1,142,985	761,335	745,955	927,760
Monroe	13,910,175	11,049,416	12,565,443	9,692,050	12,791,504	17,964,084	12,668,330	12,405,980	8,419,270	12,669,567
Montgomery		1,900	10,250		2,500	600	1,000			8,500
Morgan					400					
Morrow	12,800		1,900					1,400	1,100	1,800
Muskingum	1,712,300	3,014,184	2,409,515	936,670	925,102	1,340,040	1,774,882	1,232,938	783,508	1,031,618
Noble										
Oak										
Ottawa										
Paulding		11,300	9,410	8,600	9,250	920	550	3,000	1,000	7,000
Perry						160				2,000
Pickaway										
Pike	80,160	483,288	850	9,000	36,840	20,255	34,268	7,800	19,100	22,800
Portage			260,015	51,445						1,960
Preble	6,966,610	5,460,900	6,114,650	4,950,137	5,916,500	8,310,407	5,740,552	5,065,539	3,203,455	5,032,959
Putnam			87						1,000	1,200
Richland										
Ross	8,900	22,065	5,000	4,000	1,000	9,800	15,860	20,425	4,200	300
Sandusky										
Scioto	380,079	1,061,913	973,514	337,290	255,210	313,410	271,619	257,400	213,075	250,500
Seneca										
Shelby	133,650	159,161	178,125	154,266	160,310	108,100	76,770	32,980	43,355	158,344
Stark								500	5,150	2,852
Summit	48									700
Trumbull										
Tuscarawas			146	93						
Union	50	50		4,000		2,000		27		
Van Wert				5,500						
Vinton	1,890	1,700	25					30		
Warren	2,649,640	2,225,208	2,627,140	1,422,435	3,048,525	4,129,975	2,967,346	4,100,536	2,014,207	2,859,282
Washington	12,486	35,386	22,925	1,200	900	9,086	150	4,900	6,070	4,750
Wayne	134,090	86,300	167,055	250,000	247,190	337,950	178,825	229,980	313,425	331,239
Williams	719,517									
Wood										
Wyandot							69			200
Total product	64,678,656	67,107,409	72,273,052	42,830,236	56,744,968	70,706,878	55,332,685	49,944,050	39,343,870	49,641,586
Total area	64,776	84,553	91,701	60,987	75,358	70,050	65,625	58,451	50,878	55,322

Average area for 10 years, 67,770 acres.
Average product for 10 years, 56,860,340 pounds.

COMPARATIVE TABLE SHOWING PRODUCTION OF BUCKWHEAT IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	5		10	3	3	32	90	60	10	25
Allen.....	447	20	200	30	30	261	241	396	2	13
Ashland.....	70,589	54,290	127,422	72,046	75,868	93,080	86,578	92,477	52,841	665
Ashtabula.....	346	390	565	786	756	484	1,080	777	255	37,866
Athens.....	83	185	3,852	580	706	535	1,014	740	245	395
Auglaize.....	734		701	38		25	276	720	160	915
Belmont.....	4		20			100		8	142	95
Brown.....			90				333	489	65	312
Butler.....	541	688	914	606	762	405	466	159	19	16
Carroll.....	10		99	121	180	116	466	18	52	24
Champaign.....		25	200	60	50	35	209	60	69	91
Clark.....	25									30
Clermont.....	29		18			30	89	25	2	
Clinton.....	610	517	1,004	899	1,310	713	1,642	3,250	570	1,100
Columbiana.....	29	64	906	329	347	1,743	1,463	1,636	507	2,595
Coshocton.....	670	20	273	25	283	116	61	110	230	130
Crawford.....	526		335	55	83	43	97	143	158	248
Cuyaboga.....	172		248	14	50	49	74	167	46	292
Darke.....			184	260	492	508	207	1,146	1,201	299
Defiance.....	64	361	238	378	180	154	176	180	340	1,050
Delaware.....		6,262	10,433	5,051	4,156	3,107	3,642	4,926	3,008	1,933
Erie.....	4,502		340	10	285			200		71
Fairfield.....	130	46						886		15
Fayette.....	29		60	235	62	72	233	80	20	217
Franklin.....	2,961	3,817	4,653	3,971	2,355	1,743	2,490	3,458	1,233	1,299
Fulton.....	15		82	32	266	50	32	45	16	192
Gallia.....		14,416	42,742	19,397	18,697	20,489	14,937	12,078	6,277	4,095
Geauga.....	13,974		10	60	1	230	180	75	1,110	1,400
Greene.....	580	338	2,072	355	470	393	2,062	824	341	2,035
Guernsey.....	24		542			230	70	5,568	10	5
Hamilton.....	198	15	733	1		370	35	66	27	80
Hancock.....	13	30	262	620	503	352	158	434	217	608
Hardin.....	175	108	483	166	175	45	413	405	18	205
Harrison.....	1,415	440	1,077	1,117	3,356	226	253	623	600	292
Henry.....							12	10	10	212
HIGHLAND.....										
Hocking.....	3,252	2,822	3,535	1,235	1,149	821	1,604	1,580	1,034	3,507
Holmes.....	16		95	102	254	184	245	434	284	508
Huron.....	1,183	1,195	2,171	1,136	2,379	667	849	603	291	196
Jackson.....	12,005	9,981	12,760	4,078	2,850	1,620	2,943	1,445	1,133	1,784
Jefferson.....	830	863	626	591	497	542	433	114	93	158
Knox.....	65	21	278							973

Lake	5,130	5,371	17,457	5,457	10,880	11,813	9,358	8,340	4,781	2,610
Lawrence	20	20	23	514	18	580	75	1,689	600	256
Licking	73	73	1,563	514	328	754	75	1,350	87	1,847
Logan	75	128	612	621	353	228	170	761	311	736
Lorain			139	65	285	10	212	255	4717	265
Lucas	4,512	5,119	6,480	7,080	3,332	4,860	5,654	10,955		3,943
Madison	84			30	284					48
Maioning	747	1,692	6,651	4,841	3,125	3,614	2,593	4,016	1,316	2,100
Marion			80				182	75	89	24
Medina	917	96	2,330	290	1,121	530	131	12	402	330
Meigs	197	160	220	210	117	241	305	151	261	579
Mercer	33		238		54	149	29	93		92
Miami			8		14	83	6	36		36
Monroe	9,207	5,494	10,961	3,348	5,986	2,408	5,487	2,800	1,652	9,251
Montgomery	10				13	20		198		
Morgan	330	211	803	321	348	455	768	621	190	1,087
Morrow	25	25	81	30	275	30		195	31	433
Muskingum	280	63	41	52	80	175	63	195	20	171
Noble	139	33	496	298	77	156	166	189	50	431
Ottawa	50	20	65	150	695		84	190	55	22
Paulding	93	103	135	177	537	482	436	850	952	437
Perry	1,418	563	1,458	1,142	1,793	7,045	2,529	1,844	1,070	1,034
Pickaway						16	50	355	44	
Pike	2,953	5,517	7,335	3,294	4,165	3,583	3,847	2,147	1,132	2,065
Portage	7,459	6,661	17,038	11,326	9,594	8,327	5,909	7,349	3,589	3,228
Preble			15		25		15	10	40	
Putnam	55		23	812	70	235	214	82	247	60
Richland	75		319	255	283	88	42	318	226	727
Ross	1,456	571	399	443	1,915	1,363	2,353	1,310	783	499
Sandusky	526	500	1,125	138	640	1,723	455	480	80	496
Scioto	12,244	13,420	19,048	8,166	10,864	10,221	6,580	3,110	1,512	1,643
Seneca	50		60	36	35	100	205	264	136	15
Shelby		15	152	597	209	55	30	4	17	17
Stark	415	226	693	288	191	538	389	833	313	1,235
Summit	1,327	846	3,225	1,239	1,102	2,043	1,628	1,121	1,161	1,473
Tumbull	18,522	20,433	53,266	37,153	26,023	17,477	15,827	29,080	9,236	5,937
Tuscarawas	70	206	485	232	270	390	699	1,129	889	982
Union	10	40	202	1,050	60	15	164	125	301	964
Van Wert		50	29	120	162	90	152	196	46	101
Vinton	3,829	3,313	3,356	1,574	1,947	1,500	1,981	1,504	645	1,009
Warren	120	399	399	15	30		14	56	159	
Washington	3,936	1,678	4,072	1,313	1,386	1,244	2,889	2,090	885	2,067
Wayne	180	16	575	302	708	720	336	722	257	136
Williams	204	58	338	109	198	249	237	1,085	379	424
Wood	800	800	1,469	1,245	382	473	408	1,265	760	40
Wyandot	586	3	307	59	616	96	39	1,66	89	127
Total product	193,348	120,589	384,152	208,918	209,094	212,288	198,529	224,475	109,651	115,727
Total area	10,960	14,467	21,051	13,752	12,670	12,002	11,908	13,338	7,835	8,617

Average area for 10 years, 12,660 acres.
Average product for 10 years, 197,677 bushels.

COMPARATIVE TABLE SHOWING PRODUCTION OF FLAXSEED IN OHIO FOR TEN YEARS.

Counties.	Number of Bushels.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....						32				
Allen.....	4,951	1,705	2,797	3,707	3,215	9,160	4,011	2,927	9,314	16,929
Ashland.....							7			
Ashtabula.....										
Athens.....						3				5
Auglaize.....									15	53
Belmont.....		20								
Brown.....		8			2	20			6	
Butler.....	61			4				50		
Carroll.....										10
Champaign.....										28
Clark.....										
Clermont.....	53									
Columbiana.....			8	1					12	
Coshocton.....			10						5	
Crawford.....		7						12	100	75
Cuyahoga.....										
Darke.....			12							
Defiance.....					22	25		78		65
Delaware.....									8	50
Erie.....										36
Fairfield.....									12	
Fayette.....								38	15	
Franklin.....							45			299
Fulton.....	88		18							
Gallia.....										10
Geauga.....				100	3	30				
Greene.....	27	16	8							
Guernsey.....			5	20						
Hamilton.....						12	100	24		
Hancock.....		36	106					432		
Hardin.....	91	25								
Harrison.....					3	6	44			
Henry.....	120			8	15	20			10	12
Highland.....									96	147
Hocking.....										
Holmes.....	3,189	587	1,069	1,024	62	3,105	3,156	6,723	35	35
Huron.....					647				3,486	6,143
Jackson.....										

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Average product for 10 years, 15,468 bushels.

Stark																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</
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Average product for 10 years, 694.325. pounds.

COMPARATIVE TABLE SHOWING PRODUCTION OF BROOM CORN IN OHIO FOR TEN YEARS.

Counties.	Pounds of Broom Brush.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	250	9,660	1,800		2,500	1,635			600	600
Allen.....					2,000	400				2,000
Ashland.....					15			12		
Ashtabula.....		70								400
Athens.....		36,200	310	200	300	500	300	1,080	3,000	3,500
Auglaize.....	210	3,837	225					1,000		1,388
Belmont.....	287	2,000	2,000	2,300	800	2,300	9,500	6,302	1,008	10,600
Brown.....	2,000	1,525	7,700			4,000			6,000	3,400
Butler.....	2,700	150,850								84
Carroll.....				20,840		4,000			6,000	30,200
Champaign.....		2,450								
Clark.....	150	1,500								
Clermont.....	3,350	4,250		1,500	1,000	20				2,200
Clinton.....		1,500								
Columbiana.....		40	4							
Coshocton.....	300									
Crawford.....		175								2,000
Cuyahoga.....										
Darke.....	15,700	16,438	5,400	1,675	3,000	3,700	7,500	10,450	6,000	100
Defiance.....			4,200		1,200	2,100	1,500	750		14,100
Delaware.....										5,000
Erie.....	2,600									
Fairfield.....	12,600	7,300	1,800							600
Fayette.....	1,200	4,665	700				2,500			262
Franklin.....								10		
Fulton.....	820		1,930			1,560	2,000	4,000	1,600	13,100
Gallia.....	4	4	12					100	3,200	700
Geauga.....		20,050	445						50	
Greene.....						800		400		4,650
Guernsey.....	500	4,700							400	400
Hamersley.....		500	500						3,500	3,500
Hamilton.....	3,867	4,050								
Hancock.....		9,000		4,000	5,000					60,000
Hardin.....										
Harrison.....	6									
Henry.....	3,500	2,500	1,200				700	10,500		6,200
Highland.....										1,470
Hocking.....		800							75	
Holmes.....	188									1
Huron.....	500	600				500	1,000	3,050	3,250	6,000
Jackson.....	200						600			
Jefferson.....	500	500								150
Knox.....	400	300	500							

COMPARATIVE TABLE SHOWING USE OF COMMERCIAL FERTILIZERS FOR TEN YEARS.

Counties.	Pounds Used.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	4,663,140	5,091,263	4,496,965	4,788,520	3,555,550	4,037,723	3,972,450	3,508,900	3,311,023	3,211,435
Allen.....	1,376,825	1,112,255	698,455	512,700	441,900	582,500	450,500	289,100	415,800	268,000
Ashland.....	3,985,850	4,716,250	4,676,165	3,172,617	3,108,338	3,879,350	4,350,710	2,977,070	2,842,000	2,387,810
Ashtabula.....	7,174,209	7,669,982	6,946,966	6,389,740	7,544,864	5,889,479	5,818,727	5,580,378	6,877,055	5,478,897
Athens.....	2,262,860	1,576,975	1,866,745	1,033,000	1,190,440	1,140,415	1,453,600	1,484,378	1,371,910	835,500
Auglaize.....	2,103,725	1,151,325	1,198,825	1,133,350	1,133,350	1,088,870	799,160	714,300	1,128,900	833,550
Belmont.....	2,297,005	2,066,613	2,821,020	1,448,820	1,448,820	1,810,741	1,954,380	1,499,120	1,817,200	2,054,865
Brown.....	3,282,760	4,240,635	5,655,192	2,850,531	3,236,357	2,664,350	2,833,070	2,707,050	1,965,707	1,938,785
Butler.....	1,600,050	1,600,050	1,600,050	1,605,150	1,834,850	1,795,550	2,303,035	935,300	750,050	995,900
Carroll.....	2,778,965	2,538,445	2,394,150	2,072,910	1,943,687	1,932,819	2,008,600	1,762,700	1,666,360	1,671,900
Champaign.....	3,537,735	3,118,625	2,420,075	2,002,220	2,604,650	3,079,912	2,037,400	1,655,660	2,723,700	2,526,100
Clark.....	2,534,633	2,567,950	2,244,765	1,880,067	2,157,010	3,691,975	2,147,450	1,766,500	1,603,050	1,591,200
Clermont.....	3,048,350	2,888,290	5,040,070	1,981,380	2,752,710	2,054,068	1,582,811	2,082,488	1,220,237	1,328,050
Columbiana.....	6,372,950	5,523,695	6,086,895	4,881,300	4,734,426	5,016,290	3,913,630	3,005,685	2,665,690	2,623,164
Coshocton.....	4,866,255	3,691,867	3,082,321	2,488,260	2,126,965	3,978,372	3,886,685	4,131,796	3,543,110	3,171,208
Crawford.....	3,210,565	3,682,450	3,296,710	2,822,805	2,766,878	3,184,550	2,865,235	2,404,250	2,176,716	2,171,770
Cuyahoga.....	4,009,252	4,277,474	4,982,700	3,644,000	4,024,360	4,552,980	5,680,400	4,874,950	3,995,200	1,703,200
Darke.....	5,045,195	5,179,090	2,951,610	2,735,260	2,777,800	3,322,065	2,219,365	1,404,464	1,591,600	3,267,206
Defiance.....	1,142,551	894,785	425,425	343,800	350,200	316,380	325,100	213,360	98,700	65,060
Delaware.....	2,720,785	3,067,750	2,475,760	1,589,390	1,617,632	1,933,250	1,760,942	1,243,130	1,180,280	1,007,520
Erie.....	2,974,800	4,074,425	3,143,530	2,299,175	3,004,760	2,277,503	2,300,900	1,870,990	2,104,000	1,277,350
Fairfield.....	7,956,545	7,860,175	7,256,150	5,710,000	5,577,705	5,348,200	5,488,710	4,837,850	4,101,710	4,847,820
Fayette.....	5,171,100	5,163,750	4,368,175	2,584,000	3,028,120	3,174,261	3,571,150	2,647,750	2,558,300	2,648,200
Franklin.....	4,290,325	3,800,550	2,848,720	1,847,500	1,750,500	1,859,775	2,000,558	2,113,340	2,479,900	1,471,528
Fulton.....	2,232,440	1,473,876	1,188,000	1,832,465	665,562	538,200	266,250	142,600	109,550	76,900
Gallia.....	1,553,440	1,572,709	1,686,372	1,239,995	1,502,435	1,707,500	1,674,120	1,342,106	1,122,850	1,119,100
Geauga.....	3,799,000	4,142,600	4,339,350	3,468,450	3,408,900	3,460,965	3,403,985	3,058,900	2,709,850	2,989,400
Greene.....	4,287,207	2,967,768	2,773,560	3,492,550	3,819,350	3,418,750	2,897,594	2,013,250	1,953,950	2,682,900
Greenev.....	2,238,447	2,150,750	2,029,060	1,477,310	1,576,444	1,688,530	1,883,590	1,301,710	1,555,350	1,907,895
Hamilton.....	642,925	1,062,293	441,900	1,473,310	415,312	403,800	370,146	206,375	40,200	805,600
Hancock.....	3,577,075	3,056,525	1,714,812	882,732	987,907	1,000,500	830,640	648,675	666,000	575,700
Hardin.....	2,166,425	1,599,130	1,451,025	1,038,650	581,525	624,900	1,001,450	648,800	316,481	575,700
Harrison.....	1,050,695	970,200	960,484	960,945	690,945	768,600	706,750	701,440	832,385	898,700
Henry.....	1,194,175	941,320	1,263,270	647,315	559,870	212,600	158,050	154,810	71,900	50,360
HIGHLAND.....	7,862,458	7,547,468	7,000,985	5,678,910	6,609,508	6,639,940	5,953,550	5,537,260	6,935,633	4,506,340
Hocking.....	2,670,670	2,533,850	3,000,985	2,064,020	2,180,980	1,746,460	2,222,700	2,013,610	1,751,007	1,719,870
Holmes.....	3,416,900	4,383,050	4,008,656	2,753,040	2,435,124	2,708,125	2,708,125	2,106,470	1,894,100	1,894,363
Huron.....	7,814,690	7,112,695	6,069,150	5,540,980	6,069,150	6,842,330	5,494,000	4,934,410	3,860,270	4,500,410
Jackson.....	2,922,060	2,144,266	1,931,110	1,231,110	1,502,833	2,434,500	1,651,150	1,356,200	1,304,600	2,187,610
Jefferson.....	1,531,410	1,617,675	1,344,350	1,231,235	2,275,275	1,408,310	1,345,025	1,389,650	1,440,180	1,317,040
Knox.....	5,700,225	5,004,317	5,071,675	2,980,413	2,975,570	3,105,940	3,105,960	3,105,420	3,080,100	2,402,070

CROP AND OTHER STATISTICS

217

Laurens	2,661,350	2,838,505	2,470,848	1,745,102	2,246,120	2,283,450	1,784,000	2,073,858	1,547,755	1,435,200
Licking	234,700	1,172,647	324,420	1,151,000	168,864	517,800	3,992,244	175,020	359,800	315,000
Ligon	7,426,920	6,177,736	5,588,960	4,132,641	1,177,510	3,744,580	3,892,244	3,605,280	3,262,650	3,081,550
Logan	1,098,775	1,015,025	961,300	859,575	914,280	1,220,450	933,300	1,141,470	1,304,960	1,276,300
Lorain	5,063,900	6,304,410	6,291,410	4,259,050	4,259,050	5,092,450	4,890,083	5,869,370	5,895,890	5,557,700
Lucas	1,731,710	1,372,220	1,162,250	671,593	551,701	471,963	441,140	354,060	138,500	106,280
Madison	3,136,195	1,951,214	993,000	594,850	756,330	510,800	589,320	290,000	370,800	599,064
Mahoning	4,401,102	5,701,982	5,132,780	5,156,500	5,074,275	4,410,034	4,318,440	4,140,875	3,545,154	4,011,274
Marion	1,850,650	1,715,150	1,779,650	976,925	1,027,625	753,000	764,500	610,900	462,100	99,530
Medina	7,850,737	9,696,650	8,719,620	1,136,001	1,072,625	753,000	7,090,500	7,252,300	6,035,900	5,532,050
Meigs	2,030,077	2,373,300	2,551,255	1,832,475	1,975,271	1,785,250	1,949,140	2,592,300	1,098,610	1,086,782
Mercer	1,125,320	1,500,450	1,109,075	862,903	882,700	1,477,500	861,470	576,550	349,060	320,300
Miami	3,988,035	2,870,670	2,463,371	2,336,850	3,216,230	3,215,175	2,532,720	1,953,129	1,577,300	2,007,400
Monroe	2,293,900	2,140,200	2,118,515	1,588,640	1,798,470	4,491,260	1,989,710	2,156,060	2,053,550	2,277,100
Montgomery	5,061,910	4,845,950	4,832,188	5,034,203	5,038,470	4,491,260	4,084,928	3,460,750	3,512,400	3,584,425
Morgan	3,142,904	3,013,900	2,681,305	1,980,625	1,255,714	3,232,402	2,473,405	2,220,622	1,923,300	2,195,700
Morrow	4,008,035	4,284,310	4,293,430	3,257,630	3,240,856	3,232,402	3,394,584	3,968,806	2,796,490	2,310,680
Muskingum	4,312,380	3,853,257	3,473,545	3,312,830	3,003,267	3,685,120	3,458,661	3,930,940	2,908,100	2,774,550
Noble	1,525,470	1,456,825	1,363,825	1,042,510	1,081,050	1,385,165	1,278,370	1,144,560	1,104,354	1,426,800
Ottawa	263,000	12,500	30,100	20,000	8,150	5,000	8,500	8,200	5,000	8,000
Paulding	91,363	46,025	53,300	67,355	53,300	15,020	3,930,477	3,740,720	3,543,217	3,323,820
Perry	5,873,510	4,900,270	5,136,375	4,247,735	4,472,010	4,221,395	4,764,370	3,326,967	3,746,290	3,746,290
Pickaway	8,621,085	7,161,500	7,090,925	5,881,906	5,088,005	4,744,300	2,478,465	2,497,459	1,633,920	2,434,970
Pike	3,447,000	3,563,785	3,734,325	2,632,050	2,885,061	2,911,670	5,322,950	5,589,405	5,043,600	4,779,116
Portage	7,057,996	7,181,202	7,444,425	5,114,174	4,804,930	4,939,950	6,023,200	5,480,775	6,003,590	6,472,252
Preble	8,557,470	8,197,395	6,493,875	7,849,810	7,427,310	7,106,930	23,600	25,400	5,500	21,750
Putnam	503,879	185,600	68,400	31,575	38,300	23,600	34,400	3,563,310	2,979,240	2,949,100
Richland	4,226,985	5,290,930	4,983,290	4,364,842	4,571,066	4,163,560	3,794,300	2,735,550	3,136,756	3,505,257
Ross	6,272,595	5,490,375	5,483,975	4,143,535	4,760,900	5,339,010	3,833,250	2,735,550	5,004,750	7,600,860
Sandusky	4,309,400	3,515,275	3,032,505	2,239,650	2,283,125	1,572,901	1,387,650	2,951,490	2,520,080	2,570,700
Seneca	2,751,040	3,808,125	4,062,847	3,216,300	2,535,760	2,716,485	2,943,401	4,912,910	4,194,650	4,194,650
Shelby	7,898,720	7,829,540	6,491,120	5,751,620	6,361,250	6,711,278	7,782,279	4,912,910	1,164,850	1,417,250
Stark	2,442,050	2,031,305	1,890,370	2,203,100	1,821,880	1,927,070	1,392,200	1,407,913	4,560,690	4,224,185
Stark	8,536,831	8,536,831	8,152,690	6,504,581	6,095,975	5,863,830	5,906,001	5,775,427	3,497,400	3,020,780
Summit	4,851,870	6,800,000	5,188,633	3,811,600	3,687,800	4,192,760	3,067,641	3,769,500	5,072,139	3,218,700
Talbott	4,491,180	5,181,475	5,509,317	3,489,160	3,334,239	4,056,280	3,785,737	3,933,256	1,554,318	1,564,780
Trenbuhl	2,730,529	2,789,769	1,753,720	1,860,200	1,860,200	1,975,810	1,975,810	1,578,091	740,500	511,196
Tu-Canawas	1,810,350	15,860,000	1,112,125	738,700	758,315	1,116,400	820,850	1,400	777,300	1,045,310
Union	143,250	50,600	65,300	24,900	117,200	153,400	1,036,900	1,020,000	1,115,500	1,288,875
Vernon	1,845,335	1,523,525	1,481,759	1,169,205	1,075,100	919,590	2,585,770	2,026,460	1,308,140	1,308,140
Warren	3,127,600	2,732,604	2,031,465	2,339,455	2,804,000	2,541,450	4,223,613	3,653,652	3,456,730	3,400,987
Washington	4,379,349	4,140,489	4,317,532	3,503,650	3,780,897	4,126,767	9,711,358	8,154,470	6,537,870	6,000,825
Wayne	11,147,035	11,147,035	11,020,800	8,822,122	8,311,923	8,105,288	9,711,358	1,970,000	161,200	23,300
Wayne	1,306,960	1,141,447	506,300	566,300	512,050	967,525	483,200	288,200	367,100	232,800
Wood	1,330,150	1,234,250	969,975	821,425	767,425	693,420	483,200	288,200	367,100	232,800
Wyandot	2,939,700	3,067,840	2,302,205	1,065,080	1,778,900	2,011,950	1,728,450	1,207,725	1,027,430	1,027,430
Totals	321,850,882	349,016,233	292,767,506	232,517,524	236,042,803	242,707,109	230,615,398	202,709,698	189,857,217	182,894,581
Total cost	\$4,033,324	\$4,220,591	\$3,139,702	\$3,764,483	\$2,433,627	\$2,426,752	\$2,228,190	\$1,932,792	\$1,764,788	\$1,764,445

Average number of pounds for 10 years, 248,097,880.

Average cost for 10 years, \$2472.869.

COMPARATIVE TABLE SHOWING PRODUCTION OF WOOL IN OHIO FOR TEN YEARS.

Counties.	Pounds Shorn.									
	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.
Adams.....	40,939	38,100	39,565	31,327	28,481	26,581	29,572	25,560	28,105	34,170
Allen.....	105,056	99,111	111,361	99,502	96,624	81,817	71,427	64,990	62,852	58,951
Ashtabula.....	238,038	250,000	252,683	214,881	232,481	214,100	187,701	145,780	206,233	199,290
Ashland.....	40,750	36,387	37,914	46,448	44,380	39,415	32,952	30,366	42,671	53,066
Athens.....	203,845	282,785	326,307	298,825	249,044	233,169	227,555	240,263	194,002	223,510
Audubon.....	43,020	46,805	41,461	40,277	39,549	25,210	23,150	28,713	30,604	41,392
Belmont.....	387,092	382,114	490,723	455,423	446,040	402,589	415,601	310,074	407,696	340,565
Brown.....	41,149	41,705	41,925	38,014	32,941	28,357	37,768	32,045	33,552	35,737
Butler.....	49,398	43,075	48,500	43,750	42,650	41,943	37,708	30,436	35,948	38,265
Carroll.....	367,203	370,993	303,063	373,101	343,026	288,975	305,014	314,190	293,894	285,676
Champaign.....	157,051	130,333	123,074	116,163	103,704	121,005	136,434	84,401	63,830	80,572
Clark.....	148,222	122,165	141,080	107,512	133,044	115,703	116,001	107,265	355,472	69,570
Clermont.....	16,606	16,778	21,171	17,217	16,472	17,113	11,035	13,676	12,079	19,053
Clinton.....	736,678	104,384	87,344	100,806	95,223	78,146	92,153	92,704	98,888	104,598
Columbiana.....	136,678	147,324	173,259	143,068	112,715	141,325	139,614	123,085	112,175	122,708
Coshocton.....	732,057	768,247	710,792	700,125	613,491	578,128	565,468	523,801	505,758	436,812
Crawford.....	351,062	340,847	323,040	366,395	301,101	291,330	240,103	227,384	214,644	208,226
Cuyahoga.....	19,147	21,805	22,634	21,405	25,937	23,085	20,952	21,591	22,705	29,560
Darke.....	32,569	29,353	33,615	23,123	25,221	23,228	28,584	30,473	22,953	29,285
Defiance.....	83,183	85,063	93,131	114,121	85,382	78,069	73,469	76,404	66,422	70,421
Delaware.....	335,379	327,695	298,413	244,119	263,144	58,534	219,036	214,661	181,860	231,553
Erie.....	60,447	79,229	86,801	62,917	82,882	58,534	48,681	49,701	42,225	59,474
Fairfield.....	88,558	90,365	88,512	92,248	129,830	72,465	54,118	59,366	59,561	66,819
Fayette.....	67,119	54,839	44,187	29,037	30,363	40,238	33,346	36,180	31,958	35,958
Franklin.....	55,124	52,132	42,926	41,179	58,023	38,044	37,305	32,032	42,351	50,781
Fulton.....	40,303	44,075	36,474	66,038	72,152	78,029	74,111	70,805	70,011	82,581
Gallia.....	89,841	86,079	83,620	68,787	61,288	61,313	54,307	34,063	30,668	43,173
Geauga.....	24,215	31,834	30,974	24,874	24,000	23,755	19,068	19,823	27,535	39,415
Greene.....	120,287	108,476	100,580	122,306	119,697	106,795	92,827	100,203	82,988	97,626
Guernsey.....	521,018	496,710	521,752	466,040	442,370	412,323	417,696	385,649	358,805	377,626
Hancock.....	6,978	4,664	8,403	7,770	7,913	5,204	5,450	5,343	6,210	3,030
Hamilton.....	229,218	214,266	208,068	210,375	210,258	198,140	201,051	198,069	167,824	170,156
Hardin.....	199,600	211,510	209,120	109,630	145,676	133,128	133,325	130,451	153,483	153,012
Harrison.....	776,994	900,651	820,217	682,166	728,078	684,117	624,686	625,140	676,202	574,098
Henry.....	31,370	32,241	33,630	37,585	31,448	30,814	37,847	30,745	33,062	33,548
Henry.....	112,083	92,835	92,197	80,981	68,430	78,300	76,405	59,008	54,992	75,950
Hocking.....	70,162	60,287	60,173	80,847	78,724	89,543	73,603	75,656	77,642	69,505
Holmes.....	152,805	130,381	149,525	160,736	151,806	146,892	81,647	80,997	82,173	88,410
Huron.....	498,575	463,835	471,849	434,177	392,370	358,708	315,730	321,771	317,830	310,231
Jackson.....	15,263	15,548	17,723	14,450	17,004	14,145	13,104	18,617	24,150	25,619

Jefferson	324,127	277,046	289,181	270,339	251,274	274,029	203,201	394,103	227,873	279,106
Knox	1,054,975	968,708	977,941	578,111	667,155	676,275	675,251	674,802	670,670	531,337
Lake	9,640	11,347	11,941	22,031	13,385	15,802	14,344	14,873	18,053	14,809
Lawrence	5,010	3,647	4,031	4,271	3,379	2,876	3,082	3,168	3,323	5,081
Licking	807,964	749,394	771,353	680,207	585,304	603,352	562,815	525,813	506,531	594,251
Lincoln	211,235	240,490	216,350	215,810	171,339	170,310	153,250	148,083	161,867	151,094
Loran	107,820	110,083	133,074	93,457	97,579	90,030	95,899	78,496	94,754	104,101
Lucas	8,046	7,419	10,760	8,065	11,723	8,978	8,318	10,228	8,314	9,639
Madison	136,567	157,386	242,050	78,214	86,534	64,302	74,244	70,527	49,084	55,779
Marion	114,974	111,620	111,267	115,129	105,090	99,967	85,491	80,957	98,461	83,723
Marion	300,500	373,513	385,906	297,719	280,810	283,012	239,992	237,484	280,585	279,410
Medina	102,803	127,226	130,580	132,268	160,300	132,307	110,496	111,689	122,864	121,472
Meigs	181,576	195,884	210,299	168,942	185,662	135,071	105,730	141,077	125,147	118,421
Merrill	61,952	56,110	50,455	42,722	53,982	40,415	39,942	40,513	45,035	47,953
Miami	11,280	10,408	12,339	7,601	10,435	9,674	5,340	5,470	7,357	10,339
Monroe	85,710	92,288	90,921	70,235	52,883	50,508	51,292	51,702	56,006	60,734
Montgomery	13,724	12,632	13,923	9,933	11,701	8,463	9,093	6,936	9,390	9,099
Morgan	555,052	563,368	567,286	517,348	402,396	411,235	382,555	375,818	330,495	337,027
Morrow	574,802	571,046	611,299	477,346	454,811	472,454	428,231	390,846	423,941	386,562
Muskingum	717,349	678,514	497,832	640,367	575,136	581,551	414,537	457,430	461,166	486,270
Noble	434,773	445,546	490,810	415,445	367,615	330,549	313,637	263,441	280,199	288,045
Ottawa	31,707	30,882	44,377	31,900	36,935	35,063	33,628	24,287	23,984	28,081
Paulding	53,860	56,090	58,406	54,714	49,424	37,098	33,201	32,800	32,370	38,192
Perry	201,593	187,956	218,989	190,432	174,394	155,066	131,780	147,103	133,946	128,001
Perry	49,501	46,239	46,083	33,694	29,113	33,094	33,700	27,346	30,548	51,701
Pike	16,570	17,402	18,578	15,368	15,372	13,753	18,805	17,394	10,007	13,667
Portage	112,224	87,712	85,315	101,811	90,127	90,398	76,791	81,813	69,953	99,099
Preble	37,328	38,065	31,323	24,434	20,387	40,926	20,784	23,581	19,050	20,595
Putnam	72,771	50,346	56,845	45,068	43,106	49,026	56,104	42,325	45,510	60,618
Richland	268,008	263,602	270,889	255,911	235,040	223,023	202,193	210,985	182,576	186,113
Ross	66,391	70,131	101,531	39,261	55,949	46,853	27,277	13,874	26,820	30,261
Sandusky	81,843	72,630	79,039	72,308	72,312	57,768	59,511	63,552	72,734	74,099
Scioto	2,943	2,837	2,281	1,541	2,416	2,453	3,912	4,725	5,018	5,025
Seneca	274,251	283,396	515,841	238,301	245,874	255,550	226,792	168,573	179,776	192,198
Shelby	23,934	34,943	43,109	27,600	24,965	23,331	16,759	22,383	20,899	26,383
Stark	76,269	83,419	103,092	87,173	80,801	79,095	72,850	76,755	80,752	85,235
Summit	20,214	25,333	29,233	26,333	23,109	24,502	22,035	28,682	29,015	34,360
Tallmadge	22,337	80,166	93,661	79,310	65,035	66,845	66,091	67,197	71,316	80,880
Tuscarawas	184,974	181,382	183,704	167,041	165,649	186,979	145,132	142,171	144,615	143,737
Union	311,979	302,693	236,328	225,197	225,916	231,553	239,405	150,453	182,522	178,228
Van Wert	103,466	72,333	72,171	69,405	69,066	61,728	61,107	56,034	41,512	63,594
Vinton	127,235	127,335	154,844	105,365	93,609	77,946	78,648	79,719	92,931	96,741
Warren	51,667	37,000	32,736	33,317	23,948	20,506	25,682	20,622	27,879	34,333
Washington	257,721	231,984	261,596	218,888	192,620	180,076	157,147	141,076	144,973	102,764
Wayne	102,715	101,754	117,744	108,020	101,882	103,944	95,464	99,838	90,103	107,773
Williams	127,225	143,432	146,847	140,198	164,960	104,042	104,567	101,361	104,225	174,932
Wood	82,734	77,455	65,541	53,902	46,845	46,845	43,481	45,447	45,447	52,661
Wyandot	414,704	505,632	440,066	365,974	337,322	338,808	326,206	323,912	320,515	413,367
Totals	15,925,603	15,767,667	16,396,633	13,752,009	13,394,108	12,789,451	11,826,237	11,426,576	11,762,087	11,681,242

Average for 10 years, 13,472,227 pounds.

TABLE SHOWING THE NUMBER OF HORSES IN OHIO FOR TEN YEARS, INCLUDING CITIES AND RURAL DISTRICTS.

Counties.	Number of Horses.									
	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.
Adams.....	6,228	5,811	5,874	5,281	5,368	4,862	4,863	4,804	4,723	4,641
Allen.....	10,636	10,765	10,488	10,111	9,603	9,494	9,504	9,429	9,494	9,807
Ashtabula.....	8,302	8,166	7,815	7,536	7,577	7,541	7,350	7,471	7,768	7,571
Athens.....	12,180	11,960	10,586	10,010	10,282	9,138	9,323	9,014	9,096	9,608
Auglaize.....	4,317	4,275	4,928	4,755	4,704	4,634	4,705	4,495	5,168	4,438
Belmont.....	10,385	10,212	9,384	8,941	9,076	8,948	9,117	8,729	8,628	8,541
Brown.....	8,634	8,573	8,143	8,503	8,495	8,295	8,403	8,112	8,028	8,508
Butler.....	8,241	7,979	7,544	7,160	7,342	6,692	6,582	6,362	6,420	6,420
Carroll.....	10,957	11,387	11,099	11,024	11,147	11,367	11,107	10,784	10,435	10,440
Champaign.....	5,928	5,065	4,622	4,533	4,261	4,128	4,020	4,340	4,521	4,365
Clark.....	11,756	11,679	11,300	11,116	11,032	11,329	10,584	10,640	10,400	10,453
Clermont.....	12,562	12,638	11,997	11,834	11,440	11,329	11,485	11,213	10,915	10,899
Columbiana.....	8,234	7,833	7,195	7,037	7,017	6,983	7,332	6,745	6,431	6,608
Coshocton.....	10,802	10,628	10,152	10,013	9,895	9,599	9,436	9,347	9,459	9,568
Crawford.....	6,821	7,135	6,432	6,703	6,587	6,552	6,184	7,700	9,927	10,024
Cuyahoga.....	9,364	9,479	9,066	8,723	8,683	8,382	8,532	6,127	5,720	5,963
Defiance.....	16,315	22,639	17,217	16,819	17,428	18,641	18,563	18,655	17,421	17,508
Delaware.....	19,471	10,051	18,576	18,757	18,081	17,835	17,375	17,150	16,347	15,534
DeWitt.....	8,333	7,082	7,297	7,235	7,095	6,933	6,896	6,582	6,076	6,076
Erie.....	10,173	10,089	9,553	9,356	8,676	8,081	7,695	8,176	8,139	8,139
Fairfield.....	6,305	6,261	5,891	5,782	5,819	5,819	5,610	5,508	5,424	5,424
Franklin.....	11,713	11,197	11,013	10,926	10,376	10,203	10,222	10,223	9,731	9,660
Franklin.....	11,619	11,197	10,915	10,622	10,393	9,767	9,556	9,493	9,033	9,189
Fulton.....	16,286	18,298	13,135	17,774	14,100	14,936	15,320	14,878	14,808	14,804
Gallia.....	8,658	8,655	8,211	4,773	7,490	7,154	6,517	6,950	6,863	7,269
Geauga.....	5,604	5,431	4,580	4,584	4,513	4,511	4,543	4,474	4,460	4,520
Greene.....	6,290	5,732	3,731	5,370	6,623	5,309	5,036	5,102	5,134	5,248
Guernsey.....	10,024	10,907	10,816	10,637	10,067	10,325	9,566	9,024	9,659	9,757
Hamilton.....	7,356	6,848	5,315	5,335	5,313	3,140	5,244	5,007	4,928	5,094
Hancock.....	14,803	19,593	15,033	13,455	13,923	16,143	16,673	16,115	16,483	16,498
Hardin.....	11,830	11,592	10,788	10,452	9,920	9,933	10,364	10,498	10,963	10,468
Harrison.....	11,036	11,487	9,610	9,568	9,419	9,900	8,903	8,916	8,304	8,130
Henry.....	5,336	5,165	5,095	4,753	4,773	4,800	4,938	5,092	4,854	4,088
Hocking.....	9,015	9,081	8,391	7,692	7,692	7,178	7,391	7,157	6,833	7,085
Hocking.....	10,336	9,335	9,394	8,566	8,796	8,632	8,371	8,390	8,166	8,437
Holmes.....	4,389	4,298	3,769	3,653	3,653	3,800	3,811	3,571	3,583	3,568
Huron.....	7,459	7,603	7,212	6,989	7,173	6,874	7,150	6,825	7,292	7,132
Jackson.....	9,802	9,231	8,496	8,007	8,500	8,357	8,545	8,111	7,907	7,855
Jackson.....	3,818	3,935	3,680	3,438	3,355	3,233	3,405	3,218	3,214	3,441

Jefferson.....	5,519	8,897	5,776	5,767	5,997	5,682	5,713	5,681	5,580	5,595
Knox.....	7,728	9,035	8,545	8,321	8,328	8,332	8,170	8,166	7,573	7,735
Lake.....	4,850	4,850	4,600	4,498	4,340	4,744	4,446	4,446	4,412	4,428
Lawrence.....	3,705	4,315	3,760	3,559	3,656	3,469	3,716	3,655	3,805	3,767
Licking.....	13,912	14,133	13,634	13,110	12,827	13,155	13,247	12,272	13,046	12,378
Logan.....	11,165	11,550	10,850	10,908	10,364	9,577	10,032	9,876	9,132	9,768
Lorain.....	10,809	10,672	10,188	10,010	10,135	9,853	9,846	9,410	9,504	9,172
Lucas.....	5,485	10,193	8,726	8,543	8,314	8,653	9,053	8,329	9,062	9,682
Madison.....	12,851	12,185	12,450	10,818	10,440	10,341	9,688	9,478	9,501	9,644
Mahoning.....	9,927	10,079	9,154	8,929	10,271	10,000	8,711	7,761	7,856	8,515
Marion.....	9,441	8,726	9,289	7,958	7,806	7,945	7,928	7,761	7,656	7,683
Medina.....	8,415	9,488	9,488	8,771	8,411	8,626	9,036	8,449	8,449	8,179
Meigs.....	5,270	5,478	4,773	4,175	4,176	4,009	4,280	4,261	4,506	4,603
Mercer.....	12,397	12,293	10,985	10,810	10,573	10,259	10,365	10,686	9,696	9,430
Miami.....	10,253	12,945	12,551	12,118	11,766	11,704	11,725	10,689	11,328	11,542
Monroe.....	5,008	5,004	5,298	4,392	4,399	4,637	5,042	4,925	5,036	5,268
Montgomery.....	15,967	16,697	16,288	16,543	15,863	16,154	16,007	15,719	15,698	16,140
Morgan.....	4,572	4,863	4,776	4,500	4,619	4,369	4,690	4,593	4,578	4,560
Morrow.....	8,279	8,674	8,269	8,126	7,939	7,911	7,939	7,503	7,350	7,388
Muskingum.....	9,576	9,382	9,162	8,703	8,938	9,004	9,032	9,090	9,092	8,903
Noble.....	5,725	5,282	5,001	4,657	4,342	4,118	5,456	4,440	5,564	4,583
Ottawa.....	6,764	5,959	5,403	5,566	5,319	5,437	5,363	5,210	5,564	5,395
Paulding.....	10,392	9,051	8,030	7,497	6,597	6,600	6,144	6,426	6,478	5,923
Perry.....	6,367	6,793	6,267	6,258	6,166	6,038	6,097	6,037	5,799	5,824
Pickaway.....	12,180	11,615	11,583	11,121	10,671	10,431	9,904	9,602	9,837	9,302
Pike.....	3,199	4,249	4,209	3,936	3,990	3,996	4,044	4,032	3,818	3,947
Portage.....	8,807	10,648	9,901	9,622	8,749	8,877	8,938	8,550	8,622	8,079
Preble.....	11,066	10,998	10,698	10,945	10,635	10,524	10,325	9,972	9,983	9,937
Putnam.....	10,873	10,672	9,853	9,566	9,136	9,417	9,688	8,874	8,987	8,953
Richland.....	9,957	9,686	9,688	9,627	9,460	9,218	9,064	9,225	9,203	8,935
Ross.....	10,656	11,400	11,334	10,815	10,285	10,514	10,236	9,653	10,236	10,255
Sandusky.....	9,692	9,488	8,962	8,853	8,909	9,166	8,413	8,618	8,760	8,686
Scioto.....	5,932	6,021	5,723	5,557	5,429	5,365	5,462	5,149	5,458	5,314
Seneca.....	12,391	11,615	11,280	10,357	11,264	10,071	10,071	10,001	9,481	9,207
Shelby.....	9,840	10,154	9,792	9,730	9,506	9,286	9,018	8,973	9,014	9,157
Stark.....	14,965	15,502	14,804	14,621	14,648	14,836	15,262	13,131	14,531	14,836
Summit.....	10,286	10,459	9,555	9,485	9,506	9,543	9,635	9,408	8,129	8,985
Tumbull.....	10,236	11,391	10,744	10,120	10,080	10,240	10,687	11,303	10,229	10,458
Union.....	9,353	9,345	8,678	8,070	8,424	8,470	8,813	8,072	7,350	7,417
Uniontown.....	10,263	10,253	9,425	9,177	8,551	8,282	8,452	8,067	7,550	8,190
Van Wert.....	11,290	10,307	9,790	9,776	9,296	8,964	8,729	8,651	8,422	8,184
Vinton.....	2,794	2,483	2,625	2,776	2,507	2,362	2,886	2,290	2,347	2,347
Warren.....	9,708	9,531	9,390	9,425	9,279	8,704	9,299	9,403	9,439	9,650
Washington.....	7,602	8,694	7,109	7,013	6,949	7,010	6,354	6,942	7,120	7,107
Wayne.....	14,141	13,944	13,440	12,506	12,285	11,514	12,220	12,191	12,267	11,911
Williams.....	8,033	9,190	7,114	7,353	7,353	7,330	7,447	7,447	6,931	6,579
Wood.....	16,418	15,649	11,633	11,701	11,145	11,025	11,265	11,565	11,278	10,808
Wyandot.....	8,969	9,101	8,313	8,747	7,929	7,902	8,006	8,078	7,705	7,407
Totals.....	825,613	850,557	787,835	765,032	755,361	744,119	746,016	730,156	726,204	725,024

TABLE SHOWING THE NUMBER OF CATTLE IN OHIO FOR TEN YEARS, INCLUDING CITIES AND RURAL DISTRICTS

Counties.	Number of Cattle.									
	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.
Adams.....	9,447	10,210	9,571	8,962	9,366	9,197	9,900	10,346	10,467	10,615
Allen.....	13,560	14,780	14,363	15,435	15,278	15,732	16,496	16,014	15,640	17,614
Ashtabula.....	13,524	13,158	12,210	12,198	13,050	13,564	13,057	14,475	15,758	15,349
Ashtabula.....	30,964	28,752	29,220	27,170	26,110	27,369	29,290	30,385	30,186	32,201
Atkins.....	9,043	10,757	9,743	9,310	9,019	9,615	9,933	9,507	10,069	10,370
Auglaize.....	15,486	17,014	17,263	15,912	16,155	16,369	17,237	16,426	16,972	17,168
Baldwin.....	17,535	18,234	18,483	18,247	18,021	17,587	17,647	17,081	17,221	18,208
Brown.....	13,128	12,883	11,924	11,808	11,143	10,472	11,263	12,159	12,804	12,897
Butler.....	15,743	16,191	15,008	14,699	15,733	16,053	16,300	15,067	16,820	17,011
Carroll.....	11,681	10,892	10,784	11,524	11,566	11,248	11,626	12,030	12,939	13,654
Champaign.....	15,224	18,425	17,856	16,746	16,224	15,486	18,711	17,708	18,297	20,258
Clark.....	18,012	19,720	18,103	17,431	17,106	17,350	19,081	17,798	28,474	19,469
Clermont.....	15,174	14,136	12,833	11,354	11,195	11,008	11,089	10,331	9,987	10,435
Columbiana.....	14,041	14,566	13,348	12,356	13,529	13,869	15,615	15,604	15,957	17,250
Coshocton.....	19,604	19,984	19,163	19,352	19,096	19,111	20,294	19,835	21,727	21,839
Crawford.....	12,957	14,321	14,329	14,791	15,757	16,433	16,313	16,213	16,796	18,306
Cuyahoga.....	13,931	15,764	15,479	19,173	15,200	15,906	17,274	16,837	16,164	17,080
Darke.....	13,006	13,608	12,719	12,118	12,532	13,487	14,713	14,989	15,977	16,615
Defiance.....	24,489	24,917	23,467	23,462	22,901	23,631	25,104	23,671	25,269	26,928
Delaware.....	10,098	11,230	10,954	10,813	10,496	10,696	11,343	11,614	10,358	10,519
Erie.....	7,322	7,488	7,155	7,176	7,605	7,265	7,522	7,640	7,074	21,196
Fairfield.....	7,279	7,488	7,155	7,176	6,991	7,218	7,816	7,732	7,762	8,418
Fayette.....	19,674	22,026	21,445	19,891	19,947	20,381	21,590	21,888	21,140	22,346
Franklin.....	13,203	15,401	16,320	15,164	23,637	17,500	21,621	19,765	18,739	20,070
Fulton.....	20,928	21,904	20,011	18,345	18,943	19,777	20,845	20,242	20,763	21,037
Gallia.....	16,302	18,452	18,480	18,526	17,193	17,179	16,798	16,313	17,524	18,030
Geauga.....	10,407	10,756	10,332	9,905	9,781	8,960	9,843	9,400	10,366	11,491
Greene.....	21,012	20,428	19,386	19,034	18,741	19,747	20,125	20,426	21,471	21,725
Guernsey.....	14,648	17,188	15,701	14,906	14,935	15,088	15,819	18,523	17,656	18,966
Hamilton.....	12,999	13,854	12,441	11,953	12,719	12,127	13,408	13,457	13,161	13,639
Hancock.....	15,156	15,758	14,734	14,369	15,454	16,200	16,456	16,635	17,907	18,472
Harmon.....	19,270	21,363	20,804	20,724	20,159	22,966	23,370	24,472	24,772	24,972
Harrison.....	17,402	16,083	16,083	17,765	18,071	17,987	19,406	19,017	19,233	19,480
Henry.....	9,880	9,996	10,177	10,232	10,261	10,182	10,591	10,628	10,233	11,415
Hocking.....	12,928	12,650	12,980	12,204	12,020	12,750	13,568	13,433	14,598	15,427
Highland.....	19,057	19,057	23,133	16,455	17,323	17,648	20,213	20,463	20,046	20,463
Holmes.....	8,546	9,078	8,725	8,970	9,830	8,890	8,891	8,884	9,324	9,414
Huron.....	13,734	14,900	15,275	12,255	15,980	15,726	16,754	16,094	19,271	17,978
Jackson.....	12,863	13,204	12,333	11,396	11,944	12,615	13,763	14,132	15,138	15,685
Jackson.....	9,883	11,167	10,324	10,094	9,625	8,917	10,081	10,077	9,724	10,349

Jefferson.....	9,697	10,576	10,868	11,343	11,290	10,891	10,817	10,876	1,444	11,962
Knox.....	12,816	14,947	15,297	20,191	20,191	16,370	17,604	18,243	18,440	20,317
Lake.....	7,443	7,461	6,677	6,469	6,593	6,976	7,276	7,479	7,680	7,737
Lawrence.....	8,056	8,146	8,200	7,647	7,719	7,821	7,775	8,167	8,734	9,007
Licking.....	23,733	27,670	25,380	25,571	24,905	25,700	28,536	28,674	30,828	30,307
Logan.....	17,326	18,350	16,126	16,126	15,451	16,139	17,734	17,629	18,437	20,257
Loran.....	20,537	20,200	20,972	19,682	19,400	20,613	21,823	21,224	22,170	23,903
Lucas.....	8,977	9,788	9,107	9,334	9,292	9,463	9,625	9,876	10,268	10,140
Madison.....	18,030	18,304	18,438	18,834	18,531	18,735	21,432	20,936	19,876	24,032
Mahoning.....	16,033	16,033	17,289	16,392	17,289	18,240	18,240	16,429	19,736	19,580
Marion.....	13,101	14,738	14,690	13,418	13,184	14,215	15,241	15,223	15,681	17,333
Medina.....	18,454	16,870	15,306	15,473	15,068	15,664	16,738	17,131	17,891	18,134
Meigs.....	10,351	11,180	12,697	12,697	8,750	10,076	8,956	8,452	9,688	10,010
Mercer.....	15,690	15,690	17,327	19,577	16,622	17,001	18,968	18,135	18,793	18,725
Monroe.....	13,024	15,987	14,562	13,826	13,663	13,792	14,966	14,405	15,028	16,064
Montgomery.....	10,667	12,884	13,540	12,108	11,364	11,617	12,993	11,771	11,563	12,203
Morgan.....	18,380	19,069	17,837	16,520	17,437	18,361	18,867	16,897	19,736	20,915
Morrow.....	10,105	10,887	10,946	10,946	11,384	11,389	12,114	11,999	11,916	13,043
Muskingum.....	12,290	12,847	12,838	12,838	11,927	13,038	14,520	15,292	15,294	16,837
Noble.....	20,960	19,795	19,795	20,257	21,452	21,700	22,181	23,023	23,915	24,525
Noble.....	13,958	13,958	13,553	13,553	13,804	13,365	14,381	14,866	13,864	14,561
Ottawa.....	7,797	7,876	7,876	7,997	7,599	7,843	8,542	8,198	8,960	9,040
Paulding.....	7,770	7,770	6,760	6,398	5,879	6,524	6,846	7,296	8,342	8,369
Perry.....	13,445	12,712	12,712	12,811	13,512	13,275	14,426	14,471	13,776	13,791
Pickaway.....	20,411	21,562	21,562	19,287	20,971	20,524	22,560	21,824	20,086	22,990
Pike.....	6,482	6,222	6,222	6,233	5,957	5,825	6,543	6,567	6,418	6,762
Portage.....	21,610	20,088	20,088	19,948	19,144	18,746	21,147	21,339	22,665	22,266
Putnam.....	16,535	15,558	15,558	15,386	15,630	16,240	17,341	17,035	18,367	18,824
Preble.....	14,312	15,259	15,553	14,881	14,571	16,239	17,892	17,072	19,328	19,704
Richland.....	16,011	17,397	16,853	16,979	16,368	17,369	17,049	18,050	18,906	18,817
Ross.....	15,096	15,937	17,938	17,644	17,440	19,570	21,241	19,469	20,744	22,299
Sandusky.....	11,650	12,673	12,005	13,311	11,769	13,559	13,739	14,212	14,066	15,900
Seneca.....	9,350	9,580	9,417	8,860	8,637	8,760	9,010	9,057	8,854	9,200
Shelby.....	16,522	17,263	16,963	16,058	16,344	17,442	18,543	18,813	19,423	19,292
Stark.....	14,254	15,705	15,400	14,824	14,920	13,548	15,680	15,500	16,447	16,036
Summit.....	24,223	24,496	24,611	24,300	24,773	25,253	26,237	26,303	26,212	26,580
Trumbull.....	17,619	17,619	17,537	17,127	17,482	19,873	19,236	19,510	20,067	20,585
Tuscarawas.....	26,897	26,900	26,900	25,065	25,708	26,594	26,594	26,849	29,922	30,676
Union.....	18,195	18,392	18,392	17,731	19,430	19,618	20,561	20,485	20,230	20,720
Van Wert.....	16,372	16,372	16,038	14,900	14,039	14,305	15,748	15,579	16,544	17,738
Vinton.....	11,407	11,109	10,977	10,836	11,464	11,846	12,925	13,574	12,761	13,127
Warren.....	5,549	5,507	5,819	6,658	5,770	5,953	5,753	6,193	5,983	6,031
Washington.....	15,071	14,812	13,099	12,114	12,911	12,602	13,929	14,551	15,261	18,072
Wayne.....	14,362	15,842	15,718	15,058	14,501	14,070	14,112	14,501	14,629	15,333
Williams.....	22,672	24,105	23,802	23,458	22,722	22,050	23,769	23,758	25,348	25,500
Wood.....	12,012	15,623	14,221	15,063	14,450	15,286	17,732	14,390	14,923	14,454
Wood.....	20,735	21,155	17,422	17,691	16,941	16,880	18,335	19,349	20,869	20,448
Wyandot.....	10,830	12,070	12,108	12,558	11,943	12,926	14,699	13,542	14,406	14,826
Totals.....	1,286,276	1,372,630	1,335,368	1,307,528	1,306,994	1,319,414	1,407,115	404,688	1,404,324	1,509,754

TABLE SHOWING THE NUMBER OF MULES IN OHIO FOR TEN YEARS.

Counties.	Number of Mules.									
	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.
Adams.....	451	426	385	349	290	318	299	233	234	218
Allen.....	170	167	185	165	188	134	153	108	99	92
Ashland.....	172	164	114	113	100	112	110	131	85	83
Ashtabula.....	187	120	109	89	71	48	49	32	26	20
Athens.....	273	260	129	128	118	81	77	87	123	113
Auglaize.....	244	285	259	254	246	162	151	148	102	113
Belmont.....	516	690	232	253	212	212	256	316	502	428
Brown.....	799	753	427	405	320	303	315	232	322	274
Butler.....	91	86	97	614	572	604	522	514	508	521
Carroll.....	559	538	606	105	105	97	73	84	74	81
Champaign.....	610	676	638	501	474	395	361	332	205	222
Clark.....	781	719	638	610	514	487	501	475	392	375
Clermont.....	682	711	655	583	544	536	550	565	491	566
Clinton.....	336	423	307	271	234	226	626	507	456	380
Columbiana.....	149	201	178	178	169	159	174	189	142	103
Coshocton.....	274	287	250	215	160	165	138	157	162	166
Crawford.....	194	424	170	84	104	114	107	106	141	128
Cuyahoga.....	462	476	451	413	402	402	387	377	384	317
Darke.....	120	106	89	83	66	65	55	62	49	58
Defiance.....	182	183	183	182	174	163	230	159	132	96
Delaware.....	40	29	9	22	18	20	20	11	16	14
Erie.....	218	226	215	233	189	185	208	175	170	148
Fairfield.....	408	450	414	519	565	356	385	458	310	269
Fayette.....	392	565	421	310	303	370	401	297	160	180
Franklin.....	78	66	60	40	34	23	35	30	22	30
Fulton.....	291	288	217	274	205	158	153	170	166	178
Gallia.....	72	81	50	41	45	63	32	33	26	24
Geauga.....	601	613	599	573	577	411	338	316	281	263
Greene.....	165	422	188	398	401	337	345	350	340	277
Guernsey.....	1603	1,850	1,219	1,243	1,390	1,093	1,092	1,014	1,935	1,017
Hamilton.....	210	211	129	129	107	68	63	66	50	63
Hancock.....	324	306	237	187	134	113	123	66	106	95
Hardin.....	112	131	131	109	128	118	94	103	121	57
Harrison.....	177	183	160	118	99	74	72	53	82	78
Henry.....	611	617	587	596	602	458	383	306	300	105
Highland.....	110	127	91	99	92	79	74	70	64	50
Hocking.....	107	98	97	81	101	62	64	59	54	375
Holmes.....	170	160	155	116	89	84	76	88	74	78
Huron.....	251	543	331	418	453	419	834	806	764	768
Jackson.....										

Jefferson.....	169	128	238	152	97	140	171	88	359	342	301	342	359	342	301	342	359	342	301	342	359
Knox.....	213	109	277	129	160	171	190	129	160	171	190	129	160	171	190	129	160	171	190	129	160
Lake.....	419	27	27	21	95	26	26	21	95	26	26	21	95	26	26	21	95	26	26	21	95
Lawrence.....	446	551	446	448	301	400	400	437	494	408	510	408	494	408	510	408	494	408	510	408	494
Licking.....	321	208	208	382	290	290	290	290	290	290	290	290	290	290	290	290	290	290	290	290	290
Logan.....	264	311	311	385	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293
Lorain.....	67	46	46	59	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Lucas.....	435	63	63	81	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Nadison.....	455	390	390	327	316	322	322	348	324	348	324	348	324	348	324	348	324	348	324	348	324
Nelson.....	290	331	331	308	254	249	249	292	292	292	292	292	292	292	292	292	292	292	292	292	292
Nelson.....	274	331	331	290	299	190	190	187	187	187	187	187	187	187	187	187	187	187	187	187	187
Medina.....	449	178	178	75	76	88	88	84	84	84	84	84	84	84	84	84	84	84	84	84	84
Meigs.....	280	304	304	267	271	282	282	283	283	283	283	283	283	283	283	283	283	283	283	283	283
Mercer.....	252	324	324	269	173	165	165	161	161	161	161	161	161	161	161	161	161	161	161	161	161
Miami.....	573	694	694	638	586	531	531	473	473	473	473	473	473	473	473	473	473	473	473	473	473
Monroe.....	86	78	78	74	63	43	43	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Montgomery.....	615	633	633	583	587	445	445	440	440	440	440	440	440	440	440	440	440	440	440	440	440
Morgan.....	120	107	107	175	129	112	112	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Morrow.....	189	161	161	141	129	301	301	284	284	284	284	284	284	284	284	284	284	284	284	284	284
Muskingum.....	424	453	453	370	310	70	70	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Noble.....	117	154	154	111	77	36	36	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Ottawa.....	29	46	46	25	159	112	112	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Paulding.....	311	230	230	214	169	81	81	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Perry.....	93	197	197	86	84	84	84	81	81	81	81	81	81	81	81	81	81	81	81	81	81
Pickaway.....	534	461	461	467	389	335	335	322	322	322	322	322	322	322	322	322	322	322	322	322	322
Pike.....	285	307	307	366	286	291	291	259	259	259	259	259	259	259	259	259	259	259	259	259	259
Portage.....	183	144	144	105	80	79	79	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Preble.....	786	780	780	703	672	650	650	557	557	557	557	557	557	557	557	557	557	557	557	557	557
Putnam.....	151	133	133	181	97	100	100	93	93	93	93	93	93	93	93	93	93	93	93	93	93
Richland.....	393	407	407	363	340	300	300	284	284	284	284	284	284	284	284	284	284	284	284	284	284
Ross.....	376	321	321	276	240	240	240	203	203	203	203	203	203	203	203	203	203	203	203	203	203
Sandusky.....	68	68	68	79	79	72	72	51	51	51	51	51	51	51	51	51	51	51	51	51	51
Scioto.....	773	785	785	722	672	630	630	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Seneca.....	200	200	200	168	168	149	149	147	147	147	147	147	147	147	147	147	147	147	147	147	147
Shelby.....	192	192	192	207	160	160	160	79	79	79	79	79	79	79	79	79	79	79	79	79	79
Stark.....	283	378	378	233	203	286	286	264	264	264	264	264	264	264	264	264	264	264	264	264	264
Summit.....	184	180	180	143	136	136	136	108	108	108	108	108	108	108	108	108	108	108	108	108	108
Trumbull.....	181	244	244	159	122	126	126	147	147	147	147	147	147	147	147	147	147	147	147	147	147
Tuscarawas.....	171	285	285	164	167	167	167	155	155	155	155	155	155	155	155	155	155	155	155	155	155
Union.....	174	164	164	170	147	147	147	126	126	126	126	126	126	126	126	126	126	126	126	126	126
Van Wert.....	208	185	185	162	156	156	156	131	131	131	131	131	131	131	131	131	131	131	131	131	131
Vinton.....	224	237	237	238	197	197	197	177	177	177	177	177	177	177	177	177	177	177	177	177	177
Warren.....	707	596	596	551	525	560	560	476	476	476	476	476	476	476	476	476	476	476	476	476	476
Washington.....	209	170	170	203	164	161	161	139	139	139	139	139	139	139	139	139	139	139	139	139	139
Wayne.....	514	456	456	443	457	391	391	286	286	286	286	286	286	286	286	286	286	286	286	286	286
Williams.....	187	197	197	145	129	129	129	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Wood.....	250	219	219	180	141	139	139	89	89	89	89	89	89	89	89	89	89	89	89	89	89
Wyandot.....	231	205	205	185	148	158	158	171	171	171	171	171	171	171	171	171	171	171	171	171	171
Totals.....	26,637	28,637	28,637	24,340	22,334	21,083	21,083	18,893	18,986	18,047	16,990	16,283	16,990	16,283	16,990	16,283	16,990	16,283	16,990	16,283	16,990

TABLE SHOWING NUMBER OF SHEEP IN OHIO FOR TEN YEARS.

Counties.	Number of Sheep.									
	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.
Adams.....	7,829	8,266	7,497	8,074	8,284	7,072	6,343	6,448	5,404	5,890
Allen.....	19,990	22,547	23,431	23,801	22,366	20,380	18,199	15,848	16,380	17,487
Ashland.....	35,043	40,137	40,716	40,899	39,607	37,271	36,714	31,538	33,382	34,314
Ashtabula.....	8,527	11,084	9,752	8,459	8,548	7,700	7,206	6,906	8,829	10,972
Athens.....	40,820	45,377	47,464	47,803	46,274	40,480	41,611	39,278	41,739	42,075
Auglaize.....	8,903	10,340	10,000	9,444	8,695	8,596	7,334	7,338	7,163	8,614
Belmont.....	56,057	68,441	73,870	82,297	76,086	72,893	85,143	58,818	63,307	65,923
Brown.....	9,483	10,432	10,245	9,215	8,340	7,362	7,081	7,169	6,752	7,189
Butler.....	9,025	10,072	9,916	9,121	8,367	8,375	7,345	6,485	6,712	7,232
Carroll.....	32,999	38,534	39,840	42,172	37,478	32,301	32,171	49,074	51,575	50,675
Champaign.....	26,744	30,053	26,405	24,607	22,416	22,651	21,718	19,793	15,993	17,991
Clark.....	24,961	27,830	26,224	25,265	22,525	23,617	20,909	20,675	20,522	20,003
Clermont.....	4,337	4,257	4,340	4,114	3,984	3,734	3,542	3,622	3,654	4,375
Clinton.....	24,252	23,571	20,507	18,435	17,826	16,339	15,337	15,217	15,217	16,996
Columbiana.....	21,998	27,898	27,326	29,935	28,763	24,493	25,331	22,080	24,750	26,758
Coshocton.....	81,632	93,554	95,818	98,618	93,685	89,785	80,962	75,654	74,759	72,661
Crawford.....	46,404	54,868	54,361	50,653	49,622	48,769	45,676	39,555	42,133	40,976
Cuyahoga.....	3,469	4,719	4,510	4,387	4,747	4,657	4,302	3,911	4,711	5,496
Darke.....	6,747	7,024	6,138	6,135	5,501	5,444	4,649	4,532	4,549	6,144
Defiance.....	13,308	16,938	16,414	16,379	16,564	14,835	14,206	12,530	13,889	14,724
Delaware.....	51,368	57,480	56,998	52,013	48,901	46,509	43,583	42,964	37,711	38,526
Erie.....	11,275	12,746	12,666	12,702	12,298	10,654	9,407	9,427	9,908	10,691
Fairfield.....	15,986	17,942	18,341	18,526	18,517	15,014	14,517	11,736	12,055	13,780
Fayette.....	21,775	27,630	19,163	14,423	11,690	10,689	9,989	7,659	7,720	9,710
Franklin.....	10,803	13,612	10,654	11,118	8,718	10,201	8,795	8,444	9,624	10,507
Fulton.....	11,019	13,256	14,165	14,066	16,088	15,306	14,367	13,518	15,455	16,952
Gallia.....	17,226	18,272	17,775	18,392	15,761	12,493	11,493	10,658	9,092	9,144
Geauga.....	4,790	5,571	6,033	5,772	5,288	5,099	4,598	4,469	5,553	7,013
Greene.....	24,468	23,181	22,228	20,502	17,767	16,018	14,877	15,599	15,511	15,642
Guernsey.....	70,583	82,060	79,688	81,709	75,989	69,618	67,292	63,849	60,549	61,659
Hamilton.....	2,765	2,989	2,565	2,542	2,575	2,262	1,968	1,786	1,107	1,992
Hancock.....	34,800	41,097	42,236	38,842	39,020	37,222	36,507	34,189	36,428	36,428
Hardin.....	47,252	58,183	57,596	51,544	48,448	42,124	37,223	31,947	36,130	31,798
Harrison.....	104,239	116,995	122,966	122,426	113,451	107,365	102,736	95,406	91,171	94,425
Henry.....	6,957	7,539	8,201	8,208	8,636	7,007	6,490	5,776	6,926	7,748
Hocking.....	25,548	28,566	26,559	22,858	21,620	17,959	16,025	17,456	13,327	14,680
Hocking.....	13,093	16,015	15,435	16,518	15,829	14,941	12,800	13,396	14,121	13,911
Holmes.....	24,186	28,028	29,330	31,017	28,403	26,507	26,599	24,228	23,733	23,705
Huron.....	57,983	58,744	58,778	54,576	56,498	52,159	52,775	45,977	48,254	47,172
Jackson.....	3,784	3,763	3,576	4,062	4,330	3,382	3,738	3,829	4,501	5,650

Jefferson.....	48,727	49,544	51,062	51,067	47,609	44,036	43,308	40,563	42,774	45,023
Knox.....	102,157	123,849	128,577	120,371	3,637	116,230	104,455	99,078	96,545	95,822
Lake.....	3,425	4,065	4,037	3,753	3,657	3,998	4,035	3,610	3,792	4,460
Lawrence.....	1,762	1,904	1,606	1,701	1,815	1,442	1,431	1,414	1,499	1,711
Licking.....	107,123	123,167	120,653	116,034	104,371	101,573	98,380	65,580	89,346	90,760
Logan.....	48,293	47,810	47,810	49,514	37,551	32,564	30,999	25,986	26,623	29,313
Loran.....	15,014	18,155	18,427	17,188	17,245	15,893	16,206	15,518	16,272	18,774
Lucas.....	1,449	1,994	1,034	2,077	2,165	2,005	1,707	1,492	1,873	1,993
Madison.....	26,883	40,042	21,458	21,672	21,232	22,008	20,228	15,653	15,131	15,842
Maioning.....	19,815	19,780	18,895	18,895	18,327	17,134	17,027	13,954	17,168	18,557
Marion.....	45,744	52,498	57,075	50,905	55,694	53,754	50,384	44,210	46,777	48,701
Medina.....	16,316	20,973	20,501	21,446	21,465	21,877	21,970	19,339	21,705	23,098
Meigs.....	32,597	34,169	33,993	30,408	28,593	25,064	24,172	25,361	24,350	22,563
Mercer.....	11,659	14,555	13,874	13,106	13,248	11,071	10,805	8,839	9,032	10,193
Miami.....	3,216	3,727	3,516	2,904	2,646	2,215	2,778	1,737	2,647	3,347
Monroe.....	10,942	14,060	16,641	15,147	12,678	10,431	10,451	9,641	9,109	9,326
Montgomery.....	2,948	3,475	3,021	3,007	2,894	2,915	2,227	1,991	2,060	2,500
Morgan.....	81,353	85,326	82,889	82,889	70,951	64,451	65,381	59,973	55,758	52,400
Morrow.....	68,078	76,863	77,169	75,936	70,890	70,085	67,080	61,756	61,644	74,000
Muskingum.....	99,641	107,436	97,593	106,342	94,642	91,237	86,701	85,334	81,016	82,556
Noble.....	68,454	68,454	68,454	66,886	58,867	51,018	50,839	49,898	45,358	48,434
Ottawa.....	4,621	5,783	6,224	6,683	6,012	5,386	5,641	4,408	4,787	4,018
Parkland.....	11,262	11,512	11,512	11,059	9,808	9,237	7,042	7,435	6,938	8,095
Perry.....	24,605	31,909	33,337	31,981	33,352	29,306	26,775	25,346	26,038	28,265
Pickaway.....	9,654	10,525	10,089	9,422	6,985	7,994	6,327	6,063	6,027	6,886
Pike.....	3,835	4,848	4,381	4,633	4,875	3,891	3,900	3,762	3,705	4,089
Portage.....	14,331	16,305	15,772	16,463	16,302	15,918	15,041	13,249	15,343	16,982
Preble.....	7,281	7,869	7,241	7,275	7,147	6,381	5,137	3,886	5,031	5,290
Punam.....	12,202	14,730	15,134	14,039	13,142	13,579	11,358	10,143	9,851	10,979
Richland.....	40,108	46,472	47,216	46,966	44,621	41,917	39,422	34,874	27,717	39,248
Ross.....	12,344	15,467	15,019	14,754	11,563	9,567	8,754	8,075	7,890	9,004
Sandusky.....	14,084	17,330	16,009	16,817	16,902	15,377	13,685	13,528	14,595	15,195
Seneca.....	1,234	1,288	1,289	1,155	896	858	931	1,128	1,767	1,809
Shelby.....	37,311	41,765	44,420	44,785	43,493	37,507	38,999	35,049	35,427	35,498
Shelby.....	6,397	7,370	7,277	6,982	6,758	5,554	5,020	4,573	4,300	5,548
Stark.....	12,860	15,064	16,509	16,189	16,889	15,573	15,443	11,194	15,283	16,565
Summit.....	4,819	5,193	5,493	5,197	5,073	5,189	4,936	4,588	5,416	6,722
Trumbull.....	13,178	15,234	15,362	15,662	15,564	14,474	13,719	12,206	13,367	16,540
Tuscarawas.....	32,345	34,362	33,456	33,293	33,457	29,808	28,833	26,276	26,686	27,644
Union.....	45,210	55,430	49,492	40,357	36,989	39,447	37,411	32,165	29,830	32,485
Van Wert.....	11,808	12,764	12,776	12,048	12,806	11,650	11,082	10,088	10,304	11,674
Vinton.....	20,295	21,277	21,433	21,883	19,195	16,632	15,150	15,685	16,075	17,615
Warren.....	10,250	9,295	8,314	8,010	7,281	6,628	5,237	6,378	6,136	5,800
Washington.....	38,646	42,748	41,441	37,648	33,364	29,344	27,807	27,711	26,292	27,433
Wayne.....	16,090	19,636	21,159	20,064	20,264	18,429	19,534	17,211	17,421	19,521
Williams.....	19,214	27,620	23,745	23,241	26,027	25,743	25,324	22,582	25,722	25,377
Wood.....	15,464	14,156	14,565	15,515	15,515	12,814	11,951	11,032	14,681	14,642
Wyandot.....	72,023	77,437	77,167	72,694	68,212	65,830	63,589	58,913	60,080	62,773
Totals.....	2,355,448	2,702,804	2,671,571	2,608,203	2,464,794	2,294,138	2,200,010	2,005,553	2,033,072	2,127,451

TABLE SHOWING THE NUMBER OF HOGS IN OHIO FOR TEN YEARS.

Counties.	Number of Hogs.									
	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.	1904.	1903.
Adams.....	8,177	9,094	7,256	7,066	10,366	9,890	7,488	7,943	8,899	10,478
Allen.....	28,793	27,142	22,316	24,061	30,782	31,441	23,123	22,416	21,911	23,354
Ashtabula.....	14,063	14,063	12,610	13,823	17,072	17,229	13,147	15,016	19,392	20,808
Athens.....	3,568	3,568	4,252	3,553	5,200	4,314	3,621	4,163	5,247	5,465
Baldwin.....	2,660	2,660	2,152	1,977	2,795	3,074	2,245	2,052	2,945	2,954
Belmont.....	28,768	28,962	23,623	24,235	30,635	29,906	23,192	22,278	22,179	22,407
Brown.....	7,726	8,616	6,637	6,521	8,602	8,994	7,840	7,208	9,105	9,768
Butler.....	20,710	20,765	15,870	17,589	21,224	21,219	16,088	16,558	20,849	20,069
Butler.....	26,976	28,705	24,349	22,801	28,858	25,266	18,938	20,804	24,376	21,780
Carroll.....	7,347	6,994	6,289	6,416	8,235	7,859	6,333	7,113	8,509	9,102
Champaign.....	37,922	36,704	30,183	29,544	35,397	33,375	29,004	34,731	35,287	34,498
Clark.....	27,019	30,931	25,801	26,779	29,545	28,089	23,167	24,743	25,400	25,069
Clermont.....	14,280	14,157	9,991	9,768	14,343	14,540	11,112	11,460	13,798	14,549
Clinton.....	38,461	48,285	40,437	42,370	51,608	48,242	37,179	38,220	36,826	37,210
Columbiana.....	9,792	9,386	8,269	8,531	11,048	10,213	9,225	10,518	12,596	11,927
Coshocton.....	17,535	11,654	9,537	9,259	12,392	14,898	10,696	9,812	12,535	16,786
Crawford.....	27,342	26,351	24,035	23,568	26,244	27,818	28,265	22,780	24,216	30,261
Cuyahoga.....	2,102	2,463	1,806	1,438	1,943	2,140	1,996	2,185	2,610	2,794
Darke.....	40,590	38,467	30,839	36,157	44,474	41,585	34,942	39,334	40,934	39,670
Defiance.....	15,487	13,161	9,584	9,538	16,624	16,544	13,548	16,683	15,243	15,360
Delaware.....	21,388	21,532	19,175	17,554	21,041	20,658	14,334	17,751	23,375	24,420
Erie.....	7,580	6,308	4,917	5,462	6,962	6,873	5,837	6,415	7,209	7,235
Fairfield.....	35,032	33,159	27,155	28,293	35,587	35,563	28,556	29,035	32,465	31,158
Fayette.....	31,455	46,965	39,450	45,344	48,277	42,954	35,309	35,464	32,777	29,967
Franklin.....	23,516	22,652	17,786	18,778	21,764	23,883	20,840	23,003	23,624	22,138
Fulton.....	17,610	16,597	12,875	13,334	23,186	20,821	18,571	22,688	22,956	21,298
Gallia.....	4,462	4,585	3,565	3,574	5,131	4,760	3,755	4,061	5,344	5,454
Geauga.....	4,112	3,748	2,981	2,969	3,683	3,889	3,300	3,333	4,183	5,454
Greene.....	35,513	36,497	29,006	30,943	32,347	31,782	25,577	28,985	30,661	30,099
Guernsey.....	5,440	5,657	4,024	3,683	5,406	5,737	4,913	5,348	5,647	6,826
Hamilton.....	10,080	8,577	7,181	6,625	9,803	9,089	7,936	8,348	9,431	9,965
Hancock.....	45,819	38,553	31,491	32,228	39,621	37,124	28,980	34,198	36,663	33,075
Hardin.....	36,743	34,072	27,529	27,529	34,999	32,125	21,024	28,449	32,062	31,859
Harrison.....	5,580	5,100	4,454	3,964	5,093	5,277	4,487	4,140	5,404	6,209
Henry.....	15,106	13,946	11,262	11,939	18,996	18,134	14,849	18,167	18,743	18,494
Highland.....	36,781	38,589	32,631	40,313	39,283	39,393	28,999	28,999	32,627	32,731
Hocking.....	5,255	4,873	3,665	4,374	5,661	5,267	4,654	4,078	5,309	5,643
Holmes.....	15,208	14,440	14,203	14,151	18,419	18,572	14,833	15,738	18,154	22,589
Huron.....	13,752	12,060	9,030	9,552	13,443	13,726	10,148	11,203	14,252	15,649
Jackson.....	3,743	3,429	2,656	2,459	3,598	3,177	3,178	3,012	3,446	3,557

Jefferson.....	5,057	5,566	4,550	4,576	5,904	5,772	4,932	4,966	5,811	6,093
Knox.....	16,616	17,844	15,847	17,864	17,882	19,351	15,464	16,253	21,000	23,363
Lake.....	2,324	2,096	1,579	1,295	1,711	1,658	1,546	1,623	2,000	2,052
Lawrence.....	3,621	4,471	3,613	2,797	4,228	3,567	3,143	3,050	4,076	4,505
Licking.....	24,092	25,965	20,135	20,800	27,332	28,788	22,224	23,269	28,555	30,896
Logan.....	28,565	28,820	22,272	24,419	33,558	34,570	24,659	27,000	28,309	30,840
Lorain.....	7,093	7,993	6,433	5,738	7,330	7,089	6,612	7,001	8,412	8,453
Lucas.....	8,906	8,006	7,125	6,510	8,602	7,456	6,603	8,452	9,023	9,087
Madison.....	35,936	37,739	33,370	35,660	43,919	41,010	30,803	34,646	33,243	36,882
Mahoning.....	7,390	7,390	6,292	6,659	8,062	8,003	7,123	7,068	7,457	8,305
Marion.....	34,444	32,785	28,678	26,781	30,132	30,540	22,541	27,005	29,900	30,518
Medina.....	7,933	8,613	7,049	7,233	9,543	9,559	8,303	9,173	11,075	11,072
Meigs.....	3,199	3,617	2,114	1,760	2,636	2,233	2,276	2,278	3,272	3,180
Mercer.....	29,156	27,890	25,520	26,185	31,555	32,234	23,805	25,916	27,180	28,858
Miami.....	20,206	19,251	14,187	16,465	10,236	16,145	14,985	15,918	20,060	18,233
Monroe.....	4,261	5,055	4,587	3,657	4,948	5,637	4,904	4,304	5,202	5,927
Montgomery.....	23,658	23,094	20,979	20,979	23,456	23,895	20,038	21,968	23,684	22,406
Morgan.....	3,584	2,953	2,953	2,734	4,188	4,682	3,769	3,753	4,936	5,031
Morrow.....	13,905	12,956	10,954	11,090	13,366	13,556	9,184	12,173	15,843	16,282
Muskingum.....	9,217	9,349	7,957	7,569	10,469	10,578	8,729	9,369	11,142	12,277
Noble.....	4,223	4,740	3,907	2,367	5,451	5,649	5,079	4,362	6,072	7,469
Ottawa.....	8,759	6,768	5,470	5,083	6,453	6,118	5,112	7,909	8,089	8,070
Paulding.....	13,087	12,176	8,632	8,416	11,279	11,634	9,205	10,816	8,331	11,643
Perry.....	9,147	9,186	6,943	7,523	10,043	9,758	7,891	8,028	9,117	9,589
Pickaway.....	31,642	33,509	27,180	31,235	38,730	33,246	25,420	28,869	24,644	26,068
Pike.....	6,528	7,724	4,928	5,634	8,163	7,166	5,741	5,778	6,573	7,165
Portage.....	6,571	7,123	3,726	5,034	7,212	6,694	6,249	6,850	8,085	7,553
Priebe.....	38,598	39,194	39,698	31,317	39,979	37,395	29,095	30,869	33,080	29,481
Putnam.....	31,680	29,836	25,145	25,111	32,472	34,823	28,216	31,409	30,199	28,801
Richland.....	18,700	13,311	16,265	17,197	20,230	19,378	17,181	18,763	23,617	25,275
Ross.....	28,744	30,802	25,928	25,211	30,431	32,532	23,852	22,941	25,372	25,215
Sandusky.....	22,214	18,266	15,538	17,646	21,673	19,666	17,322	22,084	19,872	16,188
Scioto.....	6,618	6,343	5,371	5,747	7,121	6,897	6,038	6,251	7,377	7,512
Seneca.....	29,603	24,908	24,908	23,775	33,725	33,693	28,890	32,238	29,925	28,913
Shelby.....	19,730	15,690	16,565	16,565	20,158	24,052	15,355	17,133	19,803	16,412
Stark.....	18,565	15,981	15,981	16,941	22,326	20,352	17,353	16,707	21,938	22,993
Summit.....	7,820	7,152	6,700	6,700	9,227	9,184	7,412	7,967	9,300	9,660
Trumbull.....	6,567	7,256	5,671	5,025	6,264	5,965	5,378	6,256	6,795	6,276
Tuscarawas.....	11,450	12,410	10,305	8,913	11,654	12,405	10,909	11,170	12,683	13,063
Union.....	31,371	34,441	30,260	26,344	34,267	34,615	28,386	32,119	34,069	34,069
Van Wert.....	23,987	20,612	17,717	17,988	26,806	27,842	22,747	23,653	24,936	23,198
Vinton.....	1,906	1,885	1,738	1,738	2,531	2,258	1,666	1,729	2,109	2,214
Warren.....	26,486	18,308	20,896	26,672	23,961	19,852	19,281	20,226	20,433	20,433
Washington.....	5,309	4,431	4,006	4,006	5,726	6,030	3,892	5,026	6,623	6,221
Wayne.....	23,238	19,199	20,285	24,168	23,763	19,692	19,692	22,529	27,830	27,933
Williams.....	20,570	12,384	12,384	12,384	22,087	23,086	18,039	21,068	23,758	22,834
Wood.....	37,908	20,227	23,151	26,770	31,795	30,086	26,475	31,460	32,096	31,178
Wyandot.....	29,424	27,071	23,202	25,012	27,739	28,832	23,543	25,229	29,062	29,148
Totals.....	1,569,563	1,555,354	1,283,903	1,320,755	1,652,589	1,620,723	1,295,413	1,404,185	1,536,308	1,553,676

ABSTRACTS FROM REPORTS OF COUNTY AGRICULTURAL SOCIETIES FOR 1912.

TABLE I—OFFICERS OF COUNTY FAIRS IN OHIO FOR 1912.

County.	President.	Postoffice.	Treasurer.	Postoffice.
Adams.....	O. C. Robuck.....	West Union.....	J. M. Coleman.....	West Union.
Allen.....	Ino. W. Shanahan.....	Lima.....	James L. Heath.....	Lima.
Ashtabula.....	H. A. McConnell.....	Dorset.....	C. C. Babcock.....	Jefferson.
Athens.....	Ino. C. Harner.....	Athens.....	E. R. Walker.....	Athens.
Belmont.....	Dan Hull.....	New Hampshire.....	J. T. Van Horn.....	New Hampshire.
Brown.....	E. N. Boggs.....	Barton.....	Otto Giffin.....	St. Clairsville.
Butler.....	S. W. Pickrell.....	Decatur.....	B. M. Marshall.....	Georgetown.
Carroll.....	I. A. Slade.....	Hibbetts.....	W. B. Wallace.....	Oxford.
Champaign.....	C. E. Grunder.....	Hamilton, R. No. 3.....	A. R. Roubush.....	Carrollton.
Clark.....	C. H. Ganson.....	Urbana.....	H. P. Wilson.....	Urbana.
Clermont.....	J. S. Nicklin.....	Springfield, R. No. 10.....	C. S. Hatfield.....	Springfield, R. 4.
Clinton.....	J. H. Dawson.....	Batavia.....	J. O. Rapp.....	Owensville.
Columbiana.....	J. R. Ross.....	Blanchester.....	Alex. Crosson.....	Blanchester.
Coshocton.....	J. O. Ewing.....	Lisbon.....	P. G. Bowman.....	Elkton.
Crawford.....	Charles McClain.....	West Lafayette.....	W. M. Smith.....	Coshocton.
E. Cuyahoga.....	John W. Stuckman.....	Bucyrus.....	Geo. W. Miller.....	Bucyrus.
E. Cuyahoga.....	L. R. Dunham.....	Cleveland.....	Geo. March.....	Chagrin Falls.
Defiance.....	G. C. Martick.....	Rocky River.....	W. D. Gardner.....	Berea.
Delaware.....	M. L. Weisenbarger.....	Arcanum.....	Ed. Ammon.....	Gordon.
Erie.....	C. M. Rogers.....	Powell.....	Geo. B. Wilderson.....	Hicksville.
Fairfield.....	W. H. Fisher.....	Mark Center.....	Arch Richards.....	Powell.
Fayette.....	Wm. P. Scheid.....	Huron, R. F. D.....	John Quinn.....	Sandusky.
Franklin.....	Geo. L. Trimmer.....	Lancaster.....	C. B. Whitley.....	Lancaster.
Fulton.....	E. A. Brenneman.....	Washington C. H.....	I. M. Willis.....	Washington C. H.
Gallia.....	T. H. Fraker.....	Camp Chase.....	Thos. Hart.....	Lockb. Jume.
Gauga.....	John W. Ecker.....	Delta.....	C. A. Knapp.....	Delta.
Greene.....	H. W. Parker.....	Gallipolis.....	A. C. Safford.....	Gallipolis.
Guernsey.....	R. D. Williamson.....	Xenia.....	R. C. Crittendon.....	Bercon.
Hancock.....	W. H. Settle.....	Cambridge, R. No. 9.....	C. M. Austin.....	Bellbrook.
Hardin.....	Grant Thomas.....	Madisonville.....	Neb. Ruel.....	Washington.
Harrison.....	John H. Rader.....	Findlay.....	C. O. McCullough.....	Cincinnati. Sta. L.
Henry.....	Chas. C. Clark.....	Kenton, R. No. 2.....	Chas. E. Stewart.....	Kenton.
HIGHLAND.....	T. J. Edwards.....	Napoleon.....	D. C. Brown.....	Napoleon.
Hocking.....	J. G. Redkey.....	Hillsboro, R. No. 4.....	J. B. Davis.....	Bainbridge, R. No. 2.
Jefferson.....	John F. White.....	Logansport.....	E. O. Pett.....	Logan.
Knox.....	J. B. Weldon.....	Smithfield.....	John Polen.....	Smithfield.
Lake.....	C. E. Jackson.....	Mt. Vernon, R. No. 6.....	J. C. Simpson.....	Mt. Vernon.
	F. H. Murray.....	Painesville.....	E. C. Smart.....	Painesville.

Lawrence	J. A. Bowen	Proctorville	A. E. Smith	Proctorville.
Licking	J. S. J. Hill	Johnstown	G. W. Horton	Newark.
Logan	C. C. Allen	Belleville	O. G. Dickinson	Harper.
Lorain	E. F. Cotton	Lorain	H. M. Andrews	Elyria.
Lucas	J. E. W. Cox	Maumee	C. R. Bowen	Toledo.
Madison	Geo. W. Fitzgerald	Orient, R. F. D.	C. C. Fowler	London.
Mahoning	Benjamin Gault	North Jackson	W. H. Holverstott	Canfield.
Marion	J. H. Gault	La Rue	F. E. Clark	Marion.
Medina	J. E. Shaw	Le Roy	A. D. Russell	Medina.
Meigs	W. H. Towrissend	Carpenter	H. A. Beckman	Pomeroy.
Mercer	Soi. Shock	Rockford	J. H. Miller	St. Henry.
Monroe	A. A. Fry	Tippecanoe City	J. H. Miller	West Milton.
Montgomery	K. C. Mooney	Woodfield	A. W. Clepinger	Woodfield.
Morgan	H. V. Hendrickson	Dayton	A. W. Clepinger	Clayton, R. No. 1.
Morrow	F. M. Reed	Malta, R. F. D.	J. W. Carter	McConnelsville
Muskingum	H. C. Hartsok	Cardington	J. G. Russel	Mt. Gilead.
Noble	F. M. Fleming	Frazersburg	A. F. Vest	Zanesville.
Paulding	John McWilliams	Sarahsville	H. E. Sittle	Mt. Ephraim.
Parry	John McWilliams	Paulding	N. G. Saurwein	Paulding.
Pike	John Meenan	New Lexington	W. A. Allen	New Lexington.
Portage	John Patterson	Piketon	T. S. Rittenour	Piketon.
Preble	W. H. Hanna	Ravenna	F. H. Carnahan	Ravenna.
Putnam	George Riner	Camden	C. F. Brooke	Eaton.
Richland	J. E. Peckenpaugh	Leipsic	Sam Cartwright	Ottawa.
Ross	T. S. Parry	Lucas	B. E. Kuhn	Shelby, R. F. D.
Sandusky	Jacob S. Caldwell	Chillicothe	Milton J. Scott	Chillicothe.
Seneca	S. J. Hirt	Fremont	Geo. W. Haynes	Fremont.
Shelby	L. Taylor	Rarden	J. W. Spriggs	Lucasville.
Stark	S. W. Rohrer	Tiffin	J. E. Burress	Sidney.
Summit	Geo. Haglerberger	Anna	Henry A. Wise	Canton.
Trumbull	J. J. Snyder	Paris	M. L. Sprankle	Bath.
Tuscarawas	C. C. McCue	Akron	M. L. Hyde	Warren.
Union	Albert Brown	Warren	C. H. Horn	Canal Dover.
Van Wert	S. B. McGuire	Marysville	H. E. Moore	Marysville.
Warren	John Laird	Van Wert	E. B. Gilliland	Van Wert.
Washington	J. W. Nicodemus	Lebanon	W. Z. Roll	Lebanon.
Wayne	S. L. Irons	Marietta	J. W. Dysle	Marietta.
Williams	J. L. Jordan	Wooster	W. A. Wilson	Wooster.
Wood	J. C. McClaran	Edgerton	C. A. Fyke	Bryan.
Wyandot	Saml. Kissinger	Bowling Green	J. D. Halsey	Bowling Green.
	James Lundy	Nevada	D. A. Bloom	Sycamore.
	R. S. Ulrich			

OFFICERS OF COUNTY FAIRS IN OHIO FOR 1912 WITH TIME AND PLACE.

County.	Secretary.	Postoffice.	Time of Fair.	Place of Fair.
Adams.....	T. W. Ellison.....	West Union.....	Sept. 10-11-12-13.....	West Union.....
Allen.....	C. A. Graham.....	Lima.....	Sept. 2-3-4-5.....	Lima.....
Ashtabula.....	Chas. R. Sargent.....	Jefferson.....	Aug. 20-21-22.....	Jefferson.....
Athens.....	H. H. Haning.....	Athens.....	Sept. 16-17-18-19.....	Athens.....
Auglaize.....	A. E. Schaffer.....	Wapakoneta.....	Aug. 27-28-29-30.....	Wapakoneta.....
Belmont.....	J. H. Taylor.....	Martins Ferry.....	Sept. 17-18-19.....	St. Clairsville.....
Brown.....	Lewis Richey.....	Georgetown.....	Oct. 1-2-3-4.....	Georgetown.....
Butler.....	C. A. Kumlir.....	Hamilton.....	Oct. 1-2-3-4.....	Hamilton.....
Carroll.....	P. B. Roubesh.....	Carrollton.....	Oct. 8-9-10-11.....	Carrollton.....
Champaign.....	J. W. Crowl.....	Urbana.....	Aug. 13-14-15-16.....	Urbana.....
Clark.....	Elwood Miller.....	Springfield.....	July 30-31-Aug. 1-2.....	Springfield.....
Clermont.....	J. E. Christy.....	Williamsburg.....	Aug. 20-21-22-23.....	Owensville.....
Clinton.....	J. W. McFadden.....	Blanchester.....	Sept. 3-4-5-6.....	Blanchester.....
Columbiana.....	E. F. Moore.....	Lisbon.....	Sept. 17-18-19.....	Lisbon.....
Coshocton.....	W. B. Miller.....	Coshocton.....	Oct. 8-9-10-11.....	Coshocton.....
Crawford.....	Guy E. Smith.....	Bucyrus.....	Sept. 3-4-5-6.....	Bucyrus.....
E. Cuyahoga.....	F. C. Gates.....	Chagrin Falls.....	Sept. 10-11-12.....	Chagrin Falls.....
Darke.....	L. M. Coe.....	Berea.....	Aug. 26-27-28-29-30.....	Berea.....
Defiance.....	Frank Plessinger.....	Greenville.....	Sept. 17-18-19-20-21.....	Greenville.....
Delaware.....	J. E. Mercer.....	Hicksville.....	Sept. 24-25-26-27.....	Hicksville.....
Erie.....	B. S. Neff.....	Powell.....	Sept. 10-11-12-13.....	Powell.....
Fairfield.....	P. H. Zerbe.....	Sandusky.....	Oct. 9-10-11-12.....	Sandusky.....
Fayette.....	W. T. McClenaghan.....	Lancaster.....	Aug. 13-14-15-16.....	Lancaster.....
Franklin.....	W. B. Rogers.....	Washington C. H.....	Aug. 6-7-8-9.....	Washington C. H.....
Fulton.....	W. G. Richards.....	Columbus.....	Sept. 17-18-19-20.....	Columbus.....
Gallia.....	E. P. Ames.....	Wauseon.....	Sept. 4-5-6.....	Wauseon.....
Geauga.....	W. R. White.....	Gallipolis.....	Sept. 10-11-12-13.....	Gallipolis.....
Greene.....	W. S. Ford.....	Burton.....	Aug. 6-7-8-9.....	Burton.....
Guernsey.....	R. R. Grieve.....	Xenia.....	Aug. 14-15-16-17.....	Xenia.....
Hamilton.....	R. C. McCreary.....	Washington.....	Sept. 11-12-13-14.....	Washington.....
Hancock.....	D. I. Sampson.....	Cincinnati, Room 30, Wiggins Bldg.....	Aug. 20-21-22-23-24.....	Carthage.....
Hardin.....	R. V. Kennedy.....	Rawson.....	Oct. 2-3-4.....	Findlay.....
Harrison.....	F. U. Jones.....	Kenton.....	Sept. 2-3-4-5-6.....	Kenton.....
Henry.....	C. M. Osburn.....	Cadiz.....	Oct. 8-9-10-11.....	Cadiz.....
Hocking.....	J. M. Rieger.....	Napoleon.....	Sept. 25-26-27.....	Napoleon.....
Ida.....	Leslie George.....	Greenfield, R. No. 4.....	Aug. 20-21-22-23.....	Rainsboro.....
Jefferson.....	F. A. Kopp.....	Logan.....	Sept. 17-18-19-20.....	Logan.....
Jackson.....	Charles Ophraith.....	Smithfield.....	Sept. 24-25-26-27.....	Smithfield.....
Lawrence.....	W. W. Reckard.....	Proctorville.....	Sept. 17-18-19-20.....	Proctorville.....
Lake.....	Howard C. Gates.....	Mt. Vernon.....	Oct. 1-2-3-4.....	Mt. Vernon.....
Lawrence.....	Geo. A. Bates.....	Painesville.....	Aug. 20-21-22-23.....	Painesville.....
Licking.....	W. W. Reckard.....	Proctorville.....	Oct. 1-2-3-4.....	Proctorville.....
Logan.....	I. M. Farmer.....	Newark.....	Aug. 20-21-22-23.....	Newark.....
	Win Kimman.....	Bellefontaine.....		Bellefontaine.....

Lorain	Anthony Nieding	Elyria	Sept. 17-18-19-20
Lucas	L. E. Clark	Toledo	Aug. 20-21-22-23
Madison	Ed. T. Shough	London	Sept. 10-11-12
Mahoning	B. L. Manchester	Canfield	Sept. 24-25-26-27
Marion	Roscoe Oborn	Marion	Sept. 3-4-5
Medina	O. O. Van Deusen	Medina	Sept. 10-11-12
Meigs	Jas. M. Lyman	Pomeroy	Aug. 19-20-21-22-23
Mercer	S. J. Vining	Celina	Aug. 20-21-22
Miami	C. D. Martin	Troy	Sept. 2-3-4-5-6
Monroe	Geo. P. Dorr	Woodsfield	Sept. 18-19-20
Montgomery	G. K. Cetone	Dayton	Oct. 1-2-3-4
Morgan	J. E. Torbert	McConnelsville	Aug. 13-14-15-16
Morrow	O. J. Miller	Mt. Gilead	Sept. 11-12-13
Muskingum	R. Y. White	Zanesville	Sept. 9-10-11-12-13
Noble	W. B. Matheny	Caldwell, R. No. 1	Sept. 25-26-27
Paulding	W. B. Jackson	Paulding	Aug. 7-8-9
Perry	Ino. R. Montgomery	New Lexington	Sept. 17-18-19-20
Pike	S. S. Daily	Pikeston	Sept. 23-24-25-26-27
Portage	C. R. Sharp	Ravenna	Oct. 1-2-3-4-5
Preble	Harry D. Silver	Eaton	Sept. 3-4-5-6
Putnam	A. P. Sandles	Ottawa	Aug. 20-21-22-23
Richland	W. H. Shryock	Mansfield	Sept. 17-18-19-20
Ross	Addison P. Minshall	Chillicothe	Aug. 13-14-15-16
Sandusky	C. A. Hokenedel	Fremont	Sept. 3-4-5-6
Seneca	J. H. Rockwell	Lucasville	Sept. 10-11-12-13
Shelby	Morgan E. Ink	Republic	Sept. 24-25-26-27
Stark	J. E. Russell	Sidney	Oct. 1-2-3-4-5
Summit	Ed. S. Wilson	Canton	Sept. 3-4-5
Tuscarawas	O. J. Swinehart	Warren	Oct. 15-16-17-18
Union	Homer C. Mackey	Canal Dover	Sept. 3-4-5-6
Van Wert	W. F. Broderick	Marysville	Sept. 2-3-4-5-6
Warren	E. V. Walborn	Van Wert	Sept. 10-11-12-13
Washington	Philip Sence	Lebanon	Sept. 10-11-12-13
Wayne	F. M. Mitchell	Marietta	Sept. 10-11-12-13
Williams	G. J. Ebricht	Shreve	Sept. 10-11-12-13
Wood	Robert Ogile	Montpelier	Sept. 23-24-25-26-27
Wyandot	R. S. Sweet	Bowling Green	Sept. 17-18-19-20
	J. T. Longabaugh	Upper Sandusky	

TABLE II—ENTRIES AND AWARDS.

Counties.	HORSES.																	Total Amount Offered.	Total Number Entries.	Total Amount Premiums Awarded.													
	Roadsters, Standard.		Roadsters, Non-Standard.		American Carriage Horses.		French Coach.		German Coach.		Belgian.		Percherons.		Clydesdales and Shires.		American Bred Draft.				Hackneys.		Saddle Horses.		Harness Classes.		Other Breeds.		Shetland Ponies.		Other than Shetland Ponies.		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.				No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	
Adams	34	9	10	2	1	1	29	3	4	16	2	10	4	10	156	21	1	182	\$690 00	\$539 00													
Allen	5	21	21	2	1	1	29	3	4	10	2	4	4	10	5	21	1	146	733 00	418 00													
Ashtabula	18	12	12	4	1	22	16	28	12	28	2	2	2	8	24	60	16	194	547 00	223 00													
Athens	21	17	17	1	1	5	1	1	12	15	16	16	15	8	15	60	16	122	402 00	243 00													
Auglaize	42	61	11	15	18	5	4	1	31	10	10	5	5	18	5	1	51	189	560 00	447 00													
Belmont	41	11	11	15	18	5	4	1	31	10	10	22	22	46	14	75	238	735 00	670 00														
Brown	41	11	11	15	18	5	4	1	31	10	10	22	22	31	114	20	362	1,020 00	846 00														
Butler	41	11	11	15	18	5	4	1	31	10	10	22	22	18	64	21	208	440 00	394 00														
Carroll	8	35	18	1	4	1	13	1	7	23	4	8	8	10	7	21	5	138	403 00	227 00													
Champaign	32	60	32	1	4	1	13	1	7	39	4	8	8	99	20	27	97	687 00	365 00														
Clermont	34	34	34	1	7	1	24	1	58	28	3	6	6	74	38	29	213	1,230 00	731 00														
Columbiana	28	35	35	5	2	31	24	1	185	28	3	31	3	25	38	4	185	1,090 00	707 50														
Coshocton	15	17	17	5	2	2	3	7	7	31	3	3	3	2	38	1	95	880 00	358 00														
Crawford	8	1	5	1	2	2	3	7	7	31	3	3	3	2	38	1	62	878 00	174 00														
Cuyahoga, East	12	19	19	36	11	11	32	8	19	44	1	3	3	13	13	1	33	550 00	289 25														
Cuyahoga, West	24	36	36	11	14	14	12	8	33	21	3	7	7	9	8	1	6	1,418 00	657 30														
Darke	10	13	13	8	4	4	4	1	80	3	3	5	5	28	35	25	213	608 00	229 00														
Defiance	9	8	8	4	4	4	4	1	12	1	1	5	5	28	35	25	213	608 00	229 00														
Delaware	14	36	36	11	14	14	12	8	33	21	3	7	7	9	8	1	6	1,418 00	657 30														
Erie	19	9	8	4	4	6	28	4	36	1	1	5	5	28	35	25	213	608 00	229 00														
Fairfield	14	36	36	11	14	14	12	8	33	21	3	7	7	9	8	1	6	1,418 00	657 30														
Franklin	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	563 00	317 50													
Fulton	1	14	20	6	11	11	4	4	14	17	1	1	1	12	24	9	57	387 00	210 00														
Gallia	15	28	28	6	11	11	4	4	14	17	1	1	1	12	24	9	57	387 00	210 00														
Greene	50	24	24	18	18	18	18	18	38	28	3	7	7	3	62	15	139	336 50	224 50														
Guernsey	63	93	93	2	2	2	2	2	35	35	19	3	3	25	27	5	157	545 00	480 00														
Hamilton	9	9	9	1	2	2	2	2	13	13	40	10	10	40	10	9	110	634 00	336 00														
Hancock	2	18	18	1	1	1	1	1	45	45	3	3	3	36	19	8	106	1,113 50	390 00														
Hardin	2	18	18	1	1	1	1	1	45	45	3	3	3	36	19	8	106	1,113 50	390 00														
Harrison	39	54	54	35	35	35	35	35	17	17	12	12	12	3	36	34	188	229 00	188 00														
Henry	39	54	54	35	35	35	35	35	17	17	12	12	12	3	36	34	188	229 00	188 00														

Highland	5	12	10	10	13	7	15	2	64	502 50	231 00
Hocking	7	7	1	1	84	11	6	31	17	98 00	23 00
Jefferson	28	13	1	12	4	11	3	17	37	411 00	273 30
Knox	13	38	6	1	12	17	6	8	42	705 00	272 00
Lake	13	13	1	6	1	12	2	1	30	2,149 00	488 00
Lawrence	6	6	1	1	1	12	4	1	33	235 00	155 00
Licking	10	57	12	1	34	18	4	23	12	812 00	571 50
Logan	46	10	1	1	1	18	1	4	13	765 50	330 14
Lorain	26	17	8	16	19	18	1	7	6	480 25	227 75
Lucas	6	6	11	4	1	1	20	10	14	1,026 00	522 00
Madison	49	5	24	25	8	35	10	16	15	788 50	438 00
Mahoning	5	21	1	1	1	5	3	6	71	578 50	245 50
Marion	3	32	1	8	17	62	3	31	49	1,326 00	700 00
Medina	3	17	21	1	65	31	3	9	3	538 25	260 50
Negles	8	5	4	6	2	4	2	2	8	416 00	201 00
Nesher	6	5	4	6	2	4	2	2	8	416 00	425 25
Miami	6	6	26	18	3	44	2	41	35	1,350 00	1,160 00
Monroe	6	6	26	18	3	44	2	41	35	1,350 00	1,160 00
Montgomery	11	55	34	1	2	24	18	14	18	884 50	790 00
Morgan	17	37	1	1	12	24	9	14	4	372 00	174 00
Morrow	17	37	1	1	12	24	9	14	4	372 00	174 00
Muskingum	2	38	1	1	64	6	11	30	26	883 00	503 00
Noble	7	7	1	1	1	6	2	3	81	991 00	91 25
Nodding	7	7	1	1	1	16	2	2	81	991 00	91 25
Perry	15	15	1	1	1	14	2	2	81	991 00	91 25
Pike	9	9	1	1	1	14	2	2	81	991 00	91 25
Portage	16	32	20	20	18	7	1	24	33	595 00	432 00
Preble	16	32	20	20	18	7	1	24	33	595 00	432 00
Putnam	30	30	44	44	27	56	6	10	19	1,023 50	807 00
Richland	5	19	1	1	5	1	10	30	233	1,044 00	548 00
Ross	7	15	1	1	11	1	16	16	39	443 00	166 00
Sandusky	24	24	8	9	11	21	5	19	137	1,035 00	327 00
Scioto	17	17	1	2	31	19	5	19	68	1,035 00	327 00
Seneca	12	12	1	2	31	19	5	19	68	1,035 00	327 00
Shelby	33	33	1	2	27	21	5	19	68	1,035 00	327 00
Stark	15	30	1	2	27	21	5	19	68	1,035 00	327 00
Summit	38	38	9	9	58	33	15	27	21	1,020 00	364 00
Trumbull	30	30	9	9	58	33	15	27	21	1,020 00	364 00
Tuscarawas	4	4	3	3	9	9	1	4	29	325 00	138 00
Union	22	54	4	4	9	30	1	26	20	715 00	538 00
Van Wert	18	26	30	21	2	36	1	26	21	1,420 00	690 00
Warren	9	27	6	6	180	86	1	24	86	405 00	311 00
Washington	4	10	1	1	66	6	1	2	9	1,004 50	251 50
Wayne	46	46	6	11	1	33	25	25	1	534 00	326 00
Williams	6	6	28	6	22	34	31	31	11	726 00	338 00
Wood	20	10	5	5	9	8	31	31	63	764 50	381 00
Wyandot	23	23	1	1	18	8	31	31	63	456 00	240 00

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	CATTLE.															Total Amount Premiums Awarded.															
	Aberdeen Angus.		Hereford.		Polled Durhams.		Galloways.		Jerseys.		Holsteins.		Red Polls.		Guernseys.		Ayrshires.		Devons.		Brown Swiss.		Fat Cattle.		Other Breeds.		Total Number of Entries.	Total Amount Premiums Offered.			
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.			No.	No.	
Adams	14		9							13	10															13	59	\$187 00	\$160 00		
Allen		1								18	15															11	50	1,222 00	143 00		
Ashtabula	33									32	15															7	11	552 00	467 00		
Athens																										18	51	173 00	111 00		
Auglaize	39	1	28								4																	91	425 00	316 00	
Belmont										8	6																		1	4 00	
Brown	12																												1	367 00	191 00
Butler	12									31	10																			300 00	65 00
Carroll	14									53	30																			674 00	210 50
Champaign										28	1																			428 00	339 00
Clark	12	22	11							19	7																			415 00	63 00
Clemont										17	1																			20 40	369 95
Clinton	18	6								30	15																			1,110 00	121 00
Columbiana										57	11																			290 00	565 00
Coshocton	9	9	13							42	26																			585 00	160 00
Crawford										14	11																			434 00	180 00
Cuyahoga, East.										11	18																			670 00	170 00
Cuyahoga, West.										27	40																			1,241 00	865 70
Darke	12		24							27	6																			133 00	497 80
Defiance	8									9	1																			182 00	114 50
Delaware	1		9							4	3																			284 00	77 00
Erie																														210 00	80 00
Fairfield	11	23	22							5	18																			1,486 00	668 00
Franklin										12	1																			210 00	102 50
Fulton	27									22	8																			469 00	209 00
Ga. Gallia	13		5	9						4	14																			580 00	122 00
Geauga																														218 00	424 50
Greene	16	24	15							48	99																			702 00	196 00
Guernsey	12	25								29	22																			509 00	497 00
Hamilton																														596 00	136 00
Hancock	18	22	14	43						24	11																			678 00	138 00
Hardin	11																													220 00	105 00
Harrison	10									6	6																			112 00	65 00

Henry	10	8	15	10	23	7	6	1	30	00	230	00
Highland	8	8	15	10	19	13	11	14	36	59	00	176
Hocking	20	10	1	19	19	13	11	14	12	59	00	151
Jefferson	1	1	15	8	19	13	11	14	1	41	00	31
Knox	16	16	1	1	8	1	1	1	65	25	00	256
Lake	10	10	45	13	60	37	1	11	22	00	53	00
Lawrence	10	10	4	13	8	1	1	1	11	132	00	654
Licking	16	16	10	10	13	1	19	17	14	209	00	135
Logan	10	10	4	13	24	1	16	17	107	864	00	378
Lorain	10	10	1	1	36	21	21	19	81	354	00	199
Lucas	12	12	9	1	38	67	11	1	86	435	00	243
Madison	12	12	10	10	12	14	24	11	128	804	00	804
Mahoning	16	16	12	12	26	13	16	11	79	645	00	472
Marion	16	16	12	12	13	16	16	11	604	00	413	00
Medina	8	8	5	5	15	50	7	38	127	781	00	451
Meigs	6	6	4	4	10	9	2	12	130	508	75	228
Mercer	2	2	1	1	5	11	11	14	54	230	00	186
Miami	10	10	18	18	11	2	2	3	126	854	00	495
Monroe	10	10	18	18	11	2	2	3	32	994	00	266
Montgomery	21	21	10	10	11	2	2	3	13	108	00	47
Morgan	12	12	29	29	2	2	2	3	19	830	00	267
Morrow	12	12	9	9	30	18	27	5	25	219	00	96
Muskingum	9	9	10	10	17	16	3	3	39	304	00	193
Noble	10	10	5	5	5	1	1	1	170	1178	00	582
Paulding	30	30	25	25	5	1	3	3	19	382	00	93
Perry	13	13	10	10	5	1	1	1	9	611	00	38
Pike	30	30	25	25	5	1	1	1	5	211	50	14
Portage	13	13	10	10	35	27	9	18	346	00	783	00
Preble	19	19	24	24	18	16	22	16	153	1188	80	229
Putnam	10	10	1	1	13	11	11	14	3	916	00	54
Richland	10	10	1	1	19	13	11	15	24	780	00	368
Sandusky	12	12	16	16	17	16	3	3	38	304	00	140
Scholar	12	12	16	16	17	16	3	3	6	345	00	100
Scioto	16	16	1	1	19	13	11	15	78	859	00	448
Seneca	16	16	1	1	17	16	3	3	182	00	182	00
Shelby	12	12	8	8	21	67	7	14	44	790	00	219
Stark	12	12	8	8	20	7	7	19	21	453	00	202
Summit	23	23	14	14	26	30	7	29	116	720	00	427
Tallmadge	16	16	15	15	27	25	17	12	182	00	819	00
Tecumseh	16	16	15	15	23	5	17	12	182	00	819	00
Tioga	16	16	15	15	23	5	17	12	182	00	819	00
Union	21	21	15	15	17	22	21	19	70	324	00	192
Van Wert	21	21	15	15	17	22	21	19	180	00	729	00

TABLE II—ENTRIES AND AWARDS—Continued.

(1.)

Counties.	SWINE.											Total Amount Premiums Offered.	Total Amount Premiums Awarded.				
	Berkshires.		Poland Chinas.		Chester Whites.		Duroc Jerseys.		Yorkshires.		Hampshires.			Tamworths.		Other Breeds.		Total Number Entries.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Adams	17	4	1	22	6	1	6	1	32	32	\$85 00	\$75 00					
Allen	18	19	16	6	1	3	6	1	32	52	391 00	116 00					
Ashabula	17	13	17	14	1	8	6	1	32	68	224 00	138 00					
Athens	14	47	13	14	1	1	6	1	35	25	60 00	44 00					
Auglaize	18	7	18	25	18	7	1	1	15	87	290 00	154 00					
Belmont	17	17	18	25	18	7	1	1	15	15	152 00	60 00					
Brown	18	29	31	22	18	1	1	1	84	154	340 00	192 00					
Butler	9	19	19	22	11	16	1	1	31	180	623 00	442 80					
Carroll	9	19	19	22	11	16	1	1	14	88	279 00	222 00					
Champaign	19	26	21	38	19	31	14	1	31	154	312 00	276 00					
Clark	9	52	20	52	31	34	36	1	36	182	364 00	293 00					
Clermont	9	36	16	8	6	1	1	1	17	17	160 00	51 00					
Clinton	12	36	16	34	1	1	1	1	12	110	300 00	300 00					
Columbiana	9	26	11	8	1	1	1	1	54	54	208 00	134 00					
Coshocton	7	16	11	11	1	1	1	1	34	34	408 00	126 00					
Crawford	20	10	12	19	1	1	1	1	39	39	420 00	116 00					
Cuyahoga, East	3	10	12	10	7	8	6	1	6	39	330 25	94 50					
Cuyahoga, West	12	10	31	10	7	16	16	1	16	86	288 00	179 00					
Darke	34	14	53	21	18	35	35	1	35	157	449 00	372 90					
Defiance	13	4	2	18	5	2	8	1	45	45	185 00	99 00					
Delaware	5	5	11	16	5	2	8	1	47	111	195 00	63 00					
Erie	3	3	5	7	7	3	5	1	20	52	63 00	52 00					
Fairfield	18	38	21	25	8	30	18	1	36	194	1,087 00	748 00					
Franklin	16	13	8	9	8	8	10	1	70	70	180 00	101 00					
Fulton	16	13	7	9	8	8	10	1	48	48	350 00	152 50					
Galla	4	7	5	5	5	6	2	1	19	19	72 00	45 85					
Geauga	5	7	8	34	17	18	52	1	25	25	156 00	73 50					
Greene	24	16	22	14	14	10	10	1	183	183	464 00	462 00					
Guernsey	13	29	25	10	12	26	33	1	102	102	320 00	273 00					
Hamilton	13	25	16	12	5	10	10	1	32	32	247 00	158 00					
Hancock	14	13	9	5	2	16	10	1	32	32	212 00	70 00					
Hardin	13	13	9	2	1	1	1	1	10	10	104 00	69 00					
Harrison	33	29	1	2	1	1	32	1	113	113	385 00	177 00					
Henry	33	29	1	2	1	1	32	1	113	113	385 00	177 00					

Highland	10	1	2	16					2	31	175 00	58 04
Hocking			12	6					8	8	44 00	18 04
Jefferson	10		25	14	4				6	34	152 00	115 60
Knox			15	36	2				11	107	235 00	92 00
Lake	30		5	5						10	440 00	215 00
Lawrence			4	42	28					110	64 00	50 00
Licking	4		36	20	28				21	107	400 00	236 00
Logan	24		14	20						307 50	212 80	236 00
Lorain										901 50	173 50	173 50
Lucas	16	18							19	283 00	222 00	466 00
Madison	4	25		36	29	18			28	74	283 00	222 00
Mahoning	12	11		13		9				122	283 00	222 00
Marion	12	11	7	13						74	283 00	222 00
Medina	19	15	15	47	21	5				43	283 00	222 00
Meigs	22	16	12	18	9	2			6	103	283 00	222 00
Mercer		10	3	3					10	89	283 00	222 00
Miami									8	24	283 00	222 00
Monroe	9	14	11							123	283 00	222 00
Monongomery	26	26		55						183	283 00	222 00
Morgan	3	25	14	5					34	161	283 00	222 00
Morrow	19	11	20	10						63	283 00	222 00
Muskingum	19	18	57	26	10	17			34	181	283 00	222 00
Noble											22 50	307 00
Paulding		52		8					6	66	317 00	96 00
Perry	3		13							16	114 75	38 75
Pike										2	111 00	2 00
Portage	19	19	21	23					14	89	375 00	268 00
Preble	16	31	26	32					34	156	579 00	549 00
Putnam	27	24	43	26					22	179	516 00	370 00
Richland			14	10						24	335 00	84 00
Ross	11	11		15						24	328 00	212 00
Sandusky	22	53	27	35					10	157	340 00	310 00
Scioto	1			12						13	186 00	35 50
Seneca	8	16	40	24						68	340 00	207 00
Shelby	14	17	15	32	13					121	320 00	310 00
Stark	12	30	37	30					25	134	380 00	315 00
Summit	19	8	35	15	19					96	395 00	308 50
Trumbull	1	15	10	20						46	230 00	93 00
Tuscarawas	10	7	10							37	192 00	174 00
Union		30	14	16						60	174 00	82 00
Van Wert	25	61	50	42	20	21			219	510 00	464 00	464 00
Warren	10	14		16					5	45	221 00	124 00
Washington	2	14	13	5						34	166 00	101 50
Wayne	22	36	18	32					10	126	526 00	380 50
Williams	9		19	32	8	4				72	292 00	154 50
Wood	20	29	18	23	7	37			17	151	448 00	381 00
Wyandot		15	16	19						50	262 00	169 00

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	SHEEP.												Total Amount Premiums Offered.	Total Amount Premiums Awarded.													
	Merinos.		Cotswolds.		Oxford Downs.		Shropshire Downs.		Hampshire Downs.		South Downs.				Lincolns.		Dorsets.		Cheviots.		Fat Sheep.		Other Breeds.		Total Number Knives.		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.					
Adams	5			6				20	11			6				5		5		4		22	33	254 00	254 00		
Allen	82	18		13				21	26	18						27		10				6	17	278 00	278 00		
Ashtabula																						44	159	204 00	204 00		
Athens																							90	102 00	102 00		
Auglaize	11																						28	94	200 00	94 00	
Belmont	27							9	8														40	182 00	182 00	182 00	
Brown	13			12				13															71	138 00	138 00	138 00	
Butler	13							16															98	459 00	459 00	459 00	
Carroll	54	15		14				47	7			21				21						13	210	210	440 00	440 00	
Champaign	48	8		21				14				13				11								141	408 00	408 00	408 00
Clark	13							24	13			19				12						9	124	124	440 00	440 00	
Clermont								11				16				8							83	180 00	180 00	180 00	
Clinton	22	21		10				30				10				15							117	378 00	378 00	378 00	
Columbiana	13	21		14				17				12				10							99	339 00	339 00	339 00	
Coshocton	65			17				9				17				11							186	672 00	672 00	672 00	
Crawford	11							7															47	196 00	196 00	196 00	
Cuyahoga, East	10	9		12				21				5								5			64	243 75	243 75	243 75	
Cuyahoga, West	15							14	18	15		10				23						13	115	338 00	338 00	338 00	
Darke	54	25		7				10	10	4		5				20		5					153	441 00	441 00	441 00	
Defiance	7							1															32	153	386 00	386 00	386 00
Delaware								6															7	14	90 00	90 00	90 00
Erie	2	4						6	8			3											32	78 00	78 00	78 00	
Fairfield	22	17		24				33	2														170	510 00	510 00	510 00	
Franklin	39	14		12				32				19				9						17	151	370 00	370 00	370 00	
Fulton	13	16						13				12				12						13	56	193 50	193 50	193 50	
Gallia	14			4				12				20											50	75 00	75 00	75 00	
Geauga	8							7	5											3			58	239 50	239 50	239 50	
Greene	19	23		8				6				16				8						46	168	450 00	450 00	450 00	
Guernsey	20	17						15				18											70	330 00	330 00	330 00	
Hamilton	27							24				34				13						39	305	385 00	385 00	385 00	
Hancock	30							28				24				9							35	324 00	324 00	324 00	
Hardin	28	20						19															28	99	210 00	210 00	210 00
Harrison	7																						18	32 00	32 00	32 00	
Henry	18	6						21	10			6								8			32	101	263 00	263 00	263 00

[illegible]

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	HORSES—SPEED.			POULTRY.		
	Total Number Entries.	Total Amount Premiums Offered.	Total Amount Premiums Awarded.	Total Number Entries.	Total Amount Premiums Offered.	Total Amount Premiums Awarded.
Adams	62	\$4,000 00	\$5,580 00	480	\$125 00	\$107 50
Allen	90	2,465 00	2,465 00	94	252 00	52 50
Ashtabula	84	3,000 00	2,675 00	568	840 00	280 00
Athens	37	1,300 00	795 00	320	155 00	67 00
Auglaize	4	15 00	15 00	46	235 25	16 00
Belmont	84	5,000 00	4,000 00	500	123 00	123 00
Brown	112	1,400 00	1,180 68	829	433 00	278 43
Butler	38	2,810 00	2,810 00	25	85 50	10 00
Carroll	112	3,100 00	2,810 00	187	201 00	114 50
Champaign	33	1,030 00	2,395 00	1,335	46 00	267 00
Clark	97	1,475 00	1,030 00	35	25 95	14 50
Clermont	82	3,000 00	2,082 00	480	120 00	120 00
Columbiana	82	2,800 00	2,082 00	189	150 00	95 50
Coshocton	89	2,453 00	1,745 00	1,449	616 00	347 00
Crawford	87	2,600 00	1,625 00	383	389 00	289 25
Cuyahoga, East	61	2,600 00	1,625 00	197	87 10	87 25
Cuyahoga, West	74	3,630 00	2,831 50	1,324	67 15	38 50
Darke	24	400 00	360 00	199	415 50	296 78
Defiance	32	2,800 00	2,269 60	364	139 05	57 50
Delaware	108	2,900 00	2,900 00	122	104 50	78 00
Erie	90	3,415 00	2,432 50	722	220 50	83 50
Fairfield	47	1,775 00	1,264 00	459	459 00	411 75
Franklin	114	2,800 00	1,440 00	10	180 75	8 00
Geauga	34	1,600 00	1,134 50	782	264 75	264 75
Greene	147	3,905 00	3,394 50	445	388 50	164 00
Guernsey	89	3,000 00	2,075 00	1,183	325 00	475 00
Hamilton	25	850 00	850 00	6	145 00	4 50
Hancock	40	1,300 00	940 00	1,307	514 50	503 00
Hardin	32	2,350 00	1,072 50	707	470 00	305 00
Harrison	79	2,350 00	1,899 00	793	501 75	329 25
Henry	40	1,300 00	940 00	390	146 40	146 40
Hickland	32	2,350 00	1,072 50	461	359 15	174 70
Hocking	79	2,350 00	1,899 00	135	109 00	58 65
Jefferson	32	2,350 00	1,072 50	25	27 25	7 50
Knox	79	2,350 00	1,899 00	538	367 50	195 10
.....	79	2,350 00	1,899 00	235	897 50	114 50

Lake	72	2,750 00	2,560 00	953	541 00	256 25
Lawrence	30	1,700 00	1,150 00	513	105 00	14 40
Licking	164	3,250 00	2,600 00	7	242 35	147 90
Logan	63	2,800 00	2,104 50	126	150 00	84 50
Lorain	73	2,400 00	1,597 50	959	650 00	549 85
Lucas	132	6,600 00	5,020 00	339	954 50	118 00
Madison	213	3,600 00	3,600 00	91	240 00	68 75
Mahoning	29	2,200 00	2,200 00	1,346	395 75	326 50
Marion	164	5,100 00	5,100 00	1,045	504 75	349 00
Medina	47	1,875 00	1,500 75	540	560 00	192 50
Melms	28	1,680 00	950 00	20	117 00	17 00
Mercer	72	3,650 00	2,832 50	894	357 25	207 31
Miami	118	3,800 00	3,800 00	300	418 10	310 00
Monroe	108	1,775 00	1,750 00	38	150 00	31 00
Montgomery	124	6,800 00	6,800 00	525	240 00	170 50
Morgan	53	2,400 00	2,400 00	780	526 00	288 00
Morrow	121	2,700 00	2,375 00	998	660 00	556 00
Muskingum	20	400 00	400 00	416	947 00	219 83
Noble	71	2,600 00	2,260 00	2	108 00	1 00
Paulding	30	1,800 00	1,800 00	419	397 00	154 00
Perry	61	1,825 00	1,100 50	14	62 50	9 75
Pike	60	2,600 00	2,008 65	494	300 00	115 25
Portage	154	2,700 00	2,257 00	1,042	664 00	338 25
Preble	110	3,000 00	3,000 00	350		
Putnam	44	1,800 00	1,278 00	600	360 00	240 00
Richland	105	3,200 00	3,200 00	293	327 50	149 90
Ross	46	3,400 00	2,456 00	140	125 50	68 25
Sandusky	28	1,230 00	1,230 00	455	751 00	250 50
Scioto	35	2,100 00	1,230 00	228	\$3 each variety	82 30
Seneca	47	2,800 00	2,730 00	850	1,460 00	338 41
Shelby	50	3,475 00	3,467 50	248	243 00	79 15
Stark	108	2,100 00	2,060 00	544	504 00	391 00
Summit	98	2,400 00	2,400 00	1,200	900 00	862 00
Tuscarawas	116	2,800 00	1,320 00	1,788	283 50	178 75
Union	125	2,625 00	2,405 50	247	105 00	104 00
Van Wert	125	2,125 00	2,085 00	220	240 00	228 04
Warren	65	2,600 00	1,719 60	1,432	498 00	343 75
Washington	99	3,225 00	2,136 50	323		107 50
Wayne	36	1,005 00	686 15	1,528	775 00	641 00
Williams				1,536	386 00	304 25
Wood				1,685	1,503 75	965 25
Wyandot				395	160 00	133 25

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	Machinery and Agricultural Implements.				Manufactures.			
	Total Entries.	Total Amount Offered.	Total Amount Premiums Awarded.	Shop Machinery—Number.	Vehicles—Number.	Total Number Entries.	Total Amount Offered.	Total Amount Premiums Awarded.
Adams	13	\$14 00	\$11 00	.....	34	34	\$18 00	\$15 00
Allen	6	30 00	30 00	4	4	8	66 00	59 00
Astakula .....	.....	.....	.....	.....	5	5	26 50	4 75
Athens	7	21 00	18 00	.....	8	8	31 50	22 00
Audette	112	.....	.....	16	146	162	.....	.....
Belmont .....	.....	37 50	.....	.....	11	11	53 00	10 00
Brown	46	27 00	24 00	.....	10	10	15 00	12 00
Burton	3	75 00	67 50	.....	2	2	30 00	27 00
Butler .....	.....	10 00	10 00	.....	.....	.....	.....	.....
Carroll	2	15 00	10 00	.....	9	9	15 00	15 00
Champaign .....	.....	.....	.....	.....	.....	.....	.....	.....
Clark .....	.....	.....	.....	.....	7	7	5 00	5 00
Clermont .....	.....	.....	.....	.....	.....	260	50 00	50 00
Columbiana .....	.....	.....	.....	.....	.....	16	33 00	33 00
Cushock	2	25 00	25 00	.....	18	18	33 00	33 00
Crawford	127	.....	.....	.....	54	54	.....	.....
Cuyahoga, East	66	91 25	37 00	.....	34	34	55 50	30 75
Cuyahoga, West	55	67 75	38 50	11	8	19	Diplomas and 70 50	37 00
Darke .....	.....	.....	.....	.....	.....	.....	.....	.....
Defiance .....	.....	.....	.....	.....	.....	.....	.....	.....
Delaware	18	.....	.....	3	6	9	.....	.....
Erie .....	.....	.....	.....	.....	.....	.....	.....	.....
Fairfield .....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin .....	.....	.....	.....	.....	.....	.....	.....	.....
Fulton .....	.....	.....	.....	.....	.....	22	133 00	93 00
Gallia .....	.....	.....	.....	.....	.....	.....	.....	.....
Geauga .....	.....	.....	.....	.....	.....	3	30 00	30 00
Greene .....	.....	24 60	.....	5	1	6	32 00	2 50
Guernsey	5	75 00	75 00	.....	.....	.....	.....	.....
Hamilton .....	.....	.....	.....	.....	.....	.....	.....	.....
Hancock .....	.....	.....	.....	.....	.....	7	18 00	12 60
Hardin .....	.....	.....	.....	.....	.....	.....	Diploma	Diploma
Harrison	30	.....	.....	3	8	11	.....	.....
Henry .....	.....	.....	.....	.....	.....	.....	.....	.....
Highland .....	.....	.....	.....	.....	.....	.....	.....	.....
Hocking	25	.....	.....	.....	10	10	.....	.....

Jefferson	7	None	Ribbons	2	2	Ribbons
Knox	18	57 50	None	4 00	None	None
Lake	30	None	None	113 25	None	None
Lawrence	56	158 50	None	113 25	80	None
Licking	30	None	None	113 25	80	None
Logan	56	158 50	None	113 25	80	None
Loraln	30	None	None	113 25	80	None
Lucas	56	158 50	None	113 25	80	None
Madison	30	None	None	113 25	80	None
Madison	56	158 50	None	113 25	80	None
Mahoning	30	None	None	113 25	80	None
Marion	56	158 50	None	113 25	80	None
Medina	30	None	None	113 25	80	None
Melgs	56	158 50	None	113 25	80	None
Mercer	361	50 00	50 00	50 00	110	188 00
Miami	3	50 00	50 00	50 00	110	188 00
Monroe	3	50 00	50 00	50 00	110	188 00
Montgomery	3	50 00	50 00	50 00	110	188 00
Morgan	3	50 00	50 00	50 00	110	188 00
Morrow	3	50 00	50 00	50 00	110	188 00
Muskingum	3	50 00	50 00	50 00	110	188 00
Noble	3	50 00	50 00	50 00	110	188 00
Paulding	3	50 00	50 00	50 00	110	188 00
Perry	3	50 00	50 00	50 00	110	188 00
Pike	3	50 00	50 00	50 00	110	188 00
Portage	3	50 00	50 00	50 00	110	188 00
Preble	3	50 00	50 00	50 00	110	188 00
Putnam	3	50 00	50 00	50 00	110	188 00
Richland	3	50 00	50 00	50 00	110	188 00
Ross	3	50 00	50 00	50 00	110	188 00
Sandusky	3	50 00	50 00	50 00	110	188 00
Scioto	3	50 00	50 00	50 00	110	188 00
Seneca	3	50 00	50 00	50 00	110	188 00
Shelby	3	50 00	50 00	50 00	110	188 00
Stark	3	50 00	50 00	50 00	110	188 00
Summit	3	50 00	50 00	50 00	110	188 00
Tuscarawas	3	50 00	50 00	50 00	110	188 00
Union	3	50 00	50 00	50 00	110	188 00
Van Wert	3	50 00	50 00	50 00	110	188 00
Warren	3	50 00	50 00	50 00	110	188 00
Washington	3	50 00	50 00	50 00	110	188 00
Wayne	3	50 00	50 00	50 00	110	188 00
Williams	3	50 00	50 00	50 00	110	188 00
Wood	3	50 00	50 00	50 00	110	188 00
Wyandot	3	50 00	50 00	50 00	110	188 00

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	FARM PRODUCTS.										Total Number Entries.	Total Amount Offered. Premiums	Total Amount Awarded. Premiums
	Grains and Seeds.	Vegetables.	Honey and Maple.	Preserves and Canned Goods.	Butter and Cheese.	Culinary.							
						No.	No.						
Adams	27	86	6	212	12	96	439	\$136 00			\$91 00		
Allen	96	342	5	343	42	207	1,035	137 50			90 50		
Ashtabula .....	.....	124	.....	183	18	74	399	178 45			125 65
Athens	29	67	.....	114	6	10	226	174 75			97 50	
Auglaize	68	123	4	312	8	101	616	295 00			221 50		
Belmont	32	65	.....	302	3	16	417	334 25			119 00	
Brown	110	300	.....	392	32	.....	834	194 00			126 00
Butler	151	222	16	462	12	.....	948	347 00			304 20	
Carroll	96	133	.....	131	.....	93	453	136 00			128 00
Champaign	64	159	17	478	9	111	838	233 00			203 50		
Clark	92	59	17	166	.....	82	416	249 95			156 24	
Clermont	67	264	3	163	5	204	708	165 95			120 60		
Clinton	185	310	.....	48	41	53	637	538 00			538 00	
Columbiana	34	134	4	.....	280	.....	448	159 00			130 25
Coshocton	141	287	.....	216	3	26	677	362 00			340 25	
Crawford	65	171	9	118	5	90	458	195 40			166 95		
Cuyahoga, East	59	.....	.....	.....	.....	.....	59	213 55			109 55
Cuyahoga, West	80	49	4	62	.....	8	203	327 50			327 50	
Darke	116	219	.....	243	.....	80	659	359 65			274 95
Defiance	158	579	2	605	5	168	1,517	420 50			201 11		
Delaware	102	189	4	102	.....	44	441	312 00			84 50	
Erie	26	178	.....	68	10	.....	282	108 00			85 05
Fairfield	124	168	6	321	10	132	761	152 00			85 05		
Franklin	16	172	4	45	1	14	252	646 00			599 00		
Fulton	120	250	.....	45	1	14	252	188 25			68 25	
Gallia	71	49	.....	500	8	150	1,028	182 00			73 55	
Geauga	25	136	19	152	4	.....	124	133 00			68 00	
Greene	269	230	17	137	10	44	386	213 45			102 50		
Guernsey	100	86	.....	278	57	43	753	455 00			410 00	
Hamilton	33	46	10	453	60	60	524	175 00			102 10		
Hancock	120	387	.....	21	5	220	767	283 10			283 10	
Hardin	10	58	.....	387	.....	.....	507	312 20			141 25
Harrison	8	18	.....	21	1	13	103	269 00			122 50	
Henry	43	92	15	319	2	21	491	183 25			119 50		

Highland	58	125	2	56	4	109	354	144 70	80 85
Hocking	24	40	2	51	2	100	77	36 75	15 25
Jefferson	40	112	2	250	10	100	440	146 80	120 20
Knox	45	164	12	67	4	24	254	182 05	85 80
Lake	50	272	12	272	4	50	552	528 50	222 50
Lawrence	21	48	12	258	8	58	385	347 00	286 00
Licking	71	224	15	242	8	75	620	523 25	364 50
Licking	43	92	15	318	2	21	491	300 85	119 50
Logan	19	75	15	214	2	64	308	226 25	95 00
Lorain	85	195	1	152	1	35	498	785 00	677 00
Lucas	53	63	1	165	1	35	318	292 25	185 25
Madison	28	148	10	153	2	79	420	231 00	135 55
Manitou	984	738	5	392	3	161	1,563	340 00	313 50
Marion	68	144	4	235	1	86	478	147 00	115 85
Medina	17	135	6	300	4	105	456	141 50	96 25
Meigs	55	167	6	135	4	133	560	141 85	110 05
Mercer	152	284	14	370	80	140	990	280 00	264 00
Miami	130	319	19	600	12	25	53	110 00	20 60
Montgomery	130	319	19	600	12	25	53	460 00	443 00
Morgan	140	82	1	130	12	34	286	70 75	45 50
Morrow	130	25	2	296	32	55	491	130 00	110 00
Muskingum	23	8	2	185	2	38	217	305 00	118 50
Noble	13	223	2	395	1	56	225	138 75	89 50
Paulding	101	278	10	390	2	56	836	249 00	193 00
Perry	16	85	4	182	2	34	324	249 25	173 25
Pike	14	33	1	135	2	34	83	95 50	15 50
Portage	107	139	1	168	51	51	485	232 60	138 60
Preble	119	539	16	540	10	279	1,503	485 20	384 20
Putnam	107	600	30	540	50	320	1,540	520 00	270 00
Richland	107	216	175	175	56	56	554	120 25	111 75
Ross	94	186	138	138	88	88	506	115 00	68 00
Sandusky	58	136	2	272	2	293	763	229 25	188 00
Scioto	81	91	8	211	2	293	763	144 15	169 85
Seneca	102	251	6	144	5	74	470	144 15	169 85
Shelby	309	665	12	161	42	38	363	218 00	140 00
Stark	65	166	19	11	99	96	360	163 50	91 50
Summit	116	300	14	88	20	4	277	389 35	821 85
Trumbull	242	942	3	280	6	187	2,012	484 25	326 85
Tuscarawas	196	175	1	261	33	476	380	211 25	156 85
Union	49	67	1	261	1	37	380	164 00	121 65
Van Wert	125	164	7	389	6	60	445	212 00	132 00
Warren	50	152	7	307	2	12	1,889	509 00	438 25
Washington	1,201	455	28	244	16	12	562	170 95	124 10
Wayne	58	204	23	244	16	12	562	153 55	94 15
Williams	58	204	23	244	16	12	562	327 55	256 80
Wood	58	204	23	244	16	12	562	203 00	144 50
Wyandot	58	204	23	244	16	12	562	851 15	741 70
Wyandot	58	204	23	244	16	12	562	235 00	141 43

TABLE II—ENTRIES AND AWARDS—Continued.

Counties.	Fruits and Flowers.			Woman's Work			Fine Arts.			Grange.		
	Total Number Entries.	Total Amount Offered.	Total Amount Awarded.	Total Number Entries.	Total Amount Offered.	Total Amount Awarded.	Total Number Entries.	Total Amount Offered.	Total Amount Awarded.	Total Number Entries.	Total Amount Offered.	Total Amount Awarded.
Adams	48	\$36 50	\$24 50	386	\$110 25	\$88 50	87	\$40 00	\$33 00	5	\$378 00	\$230 00
Allen	213	97 50	55 75	50	90 75	82 00	1,360	375 75	278 75			
Ashtabula	283	105 70	63 00	470	195 75	171 25	132	140 10	91 80			
Athens	254	111 55	78 50	207	92 50	67 72	92	49 25	55 75			
Auglaize	419	181 00	151 60	840	318 00	324 86	720	352 00	296 00			
Belmont	327	89 00	55 25	586	194 25	113 50	99	50 25	23 00			
Brown	406	110 00	88 00	494	107 00	71 00	67	15 00	15 00			
Butler	310	114 50	97 65	782	238 50	202 60	298	133 00	117 90			
Carroll	257	97 00	95 00	380	118 50	118 50	36	27 00	20 00			
Champaign	467	182 50	122 25	561	248 00	192 25	217	140 00	110 00			
Clark	457	337 25	263 19	650	229 05	174 79	426	309 75	260 32			
Clermont	733	221 45	175 00	641	137 70	125 00	256	81 50	78 00			
Clinton	335	140 00	124 00	190	108 00	168 00	90	90 00	90 00			
Columbiana	383	132 00	120 65	155	70 00	63 00	75	48 00	44 00			
Coshocton	384	210 00	180 65	1,239	220 75	211 00	510	177 50	172 50	1	100 00	35 00
Crawford	370	163 25	136 00	1,938	590 75	415 25						
Cuyahoga, East	488	178 05	126 10	927	220 60	150 35	75	52 75	30 75			
Cuyahoga, West	201	69 35	36 95	312	136 70	100 50	65	53 70	52 40	3	235 00	225 00
Darke	254	196 25	116 10	788	228 00	163 56	426	183 00	162 45			
Defiance	273	158 25	72 75	895	346 25	274 45	38	44 00	14 00			
Delaware	72	41 30	13 80	55	21 00	17 75	5	5 25	1 75			
Erie	14	105 00	105 00	787	339 05	142 80	116	184 00	126 00			
Fairfield	623	339 00	310 00	519	204 00	178 00	347	264 00	246 00			
Franklin	87	136 50	50 50	1,015	173 50	138 25	141	114 75	88 75			
Fulton	343	160 00	60 50	500	225 00	207 50		375 00	270 50			
Galla	258	213 00	105 00	76	97 00	75 00	23	19 00	14 00			
Geauga	407	181 05	99 45	923	239 85	137 80	215	124 00	93 50			
Greene	173	140 00	128 00	378	175 00	152 50	437	160 00	145 25			
Guernsey	372	140 00	45 40	506	60 00	84 00	30	32 00	8 80			
Hamilton	192	473 80	437 15	1,372	233 75	226 50	629	158 25	151 25			
Hancock	190	96 50	75 00	488	320 00	120 00	82	128 25	75 00			
Hardin	19	12 00	7 50	689	406 55	245 60				2	100 00	76 00
Harrison	121	25 00	19 25	108	30 00	18 00	7	1 50	1 50			
Henry	245	75 25	61 50									
Highland	116	67 70	17 95	216	123 10	53 05						
Hocking				105	29 90	24 25						
Jefferson	207	75 00	62 50	370	129 00	110 00	114	50 00	42 00			

Knox	121	112 25	29 00	380	286 55	126 95	93	128 00	64 83	5	100 00	100 00
Lake	604	382 75	157 75	1,364	271 95	232 50	75	57 00	51 00	.....	.....	.....
Lawrence	284	245 00	200 00	138	271 00	120 00	20	35 00	23 35	.....	.....	.....
Licking	398	287 00	135 25	501	289 50	232 50	220	250 50	225 50	.....	.....	.....
Logan	382	236 75	187 92	610	291 40	184 22	235	138 00	119 66	2	200 00	110 00
Loran	808	150 75	107 15	473	447 15	207 95	.....	.....	.....	.....	.....	.....
Lucas	533	224 35	128 50	845	170 35	139 15	130	219 50	130 00	.....	.....	.....
Madison	199	143 50	85 75	430	358 75	191 30	112	136 50	78 00	.....	185 00	135 00
Marion	368	172 70	164 85	256	122 40	90 40	217	136 50	129 00	.....	.....	.....
Marion	390	134 75	123 90	599	287 75	210 50	520	321 00	247 50	.....	.....	.....
Medina	531	122 75	88 25	772	195 65	152 55	158	101 40	76 00	.....	.....	.....
Miles	130	46 50	29 00	205	95 75	65 00	11	25 25	2 50	.....	.....	.....
Morgan	285	60 00	49 60	640	250 00	132 97	198	100 00	96 00	.....	.....	.....
Mercer	272	325 00	310 00	782	378 00	352 90	526	292 00	195 00	.....	.....	.....
Miami	40	56 00	35 75	237	160 00	82 50	6	45 00	6 50	.....	.....	.....
Montgomery	630	498 00	498 00	.....	.....	247 00	.....	.....	165 00	.....	.....	.....
Morgan	309	51 50	29 25	201	248 00	249 50	52	.....	91 00	3	25 00	25 00
Morrow	297	97 00	65 00	592	248 00	225 00	162	35 00	75 00	.....	.....	.....
Muskingum	186	276 00	117 00	87	110 00	25 00	148	187 00	87 00	.....	.....	.....
Noble	228	55 95	19 50	54	131 25	26 25	29	86 25	89 50	.....	.....	.....
Paulding	380	299 00	64 00	474	218 00	130 00	16	71 00	41 00	.....	.....	.....
Perry	116	173 95	63 25	173	71 50	39 00	17	39 75	1 92	.....	.....	.....
Pike	117	19 50	4 50	135	130 00	39 60	5	129 25	71 25	.....	.....	.....
Portage	143	180 15	155 40	358	124 65	86 90	87	129 25	71 25	.....	.....	.....
Preble	349	120 25	106 00	912	262 50	243 50	489	281 00	258 50	2	90 00	70 00
Putnam	450	200 00	110 00	1,150	500 00	210 00	580	330 00	197 00	2	140 00	110 00
Richland	472	133 40	122 55	.....	.....	.....	450	181 70	167 90	.....	.....	.....
Ross	82	289 00	166 50	339	288 00	217 00	.....	.....	.....	.....	.....	.....
Sandusky	323	189 25	162 75	832	562 75	285 48	.....	.....	.....	.....	.....	.....
Scioto	365	248 60	126 15	128	188 70	85 50	41	30 00	28 35	1	.....	.....
Seneca	256	245 00	221 00	538	258 00	190 00	1,067	153 00	128 00	.....	.....	.....
Shelby	159	88 00	80 05	.....	.....	.....	266	283 50	246 00	.....	.....	.....
Stark	507	289 35	135 85	423	162 85	130 75	436	312 25	262 50	.....	.....	.....
Summit	780	342 65	290 00	540	117 05	96 65	156	150 65	103 25	.....	.....	.....
Trumbull	349	170 50	135 00	700	176 25	145 75	74	62 00	67 50	3	150 00	150 00
Tuscarawas	136	68 00	53 90	187	52 00	46 75	74	62 00	61 25	.....	.....	.....
Union	280	145 00	26 00	300	104 00	40 00	208	120 00	60 00	.....	.....	.....
Van Wert	280	188 00	113 50	544	289 75	175 75	300	253 25	148 50	.....	.....	.....
Warren	250	102 00	63 60	212	97 25	44 50	54	55 25	26 75	.....	.....	.....
Washington	418	250 50	125 15	116	106 95	42 95	109	150 00	79 75	.....	.....	.....
Wayne	130	87 75	61 50	1,112	327 30	252 90	331	159 50	128 25	.....	.....	.....
Williams	392	138 55	119 05	1,392	386 00	224 40	423	160 00	155 60	.....	.....	.....
Wood	232	93 30	71 75	1,201	280 90	224 70	640	325 70	291 35	.....	.....	.....
Wyandot	189	54 00	26 00	322	138 00	84 20	306	118 00	64 33	.....	.....	.....

TABLE II--ENTRIES AND AWARDS--Concluded.

Counties.	School Work.			Merchandise.		
	Total Number Entries.	Total Amount Premiums Offered.	Total Amount Premiums Awarded.	Total Number Entries.	Total Amount Premiums Offered.	Total Amount Premiums Awarded.
Adams	267	\$242.25	\$106.25	4	\$10.00	\$6.00
Allen	23	176.50	36.00	12	195.00	105.00
Altabula	300	150.00	150.00			10.10
Athens						
Buglarze				22		
Belmont						
Brown	26	36.00	27.00			
Butler						
Carroll				11	41.00	12.00
Champaign	1,420	286.75	245.00	6	42.00	12.00
Clark				11		
Clermont						
Cinton				76	216.00	216.00
Columbiana						
Coshocron	9	100.00	100.00			
Crawford	17	340.00	340.00	23	135.00	95.00
Cuyahoga, East.	20	15.00	15.00	10	111.00	82.00
Cuyahoga, West.	22	50.00	38.00	45	55.25	43.25
Darke	706	440.70	359.98			
Defiance				7	63.00	28.80
Delaware						
Erie	8	133.00	88.00			
Fairfield	369	289.00	141.50	15		
Franklin						
Fulton	288	262.00	86.25	5	49.00	49.00
Gallia						
Geauga						
Greene	12	15.00	100.00			
Guernsey				8	22.00	5.50
Hamilton	400	100.00	77.17			
Hancock				19	180.00	72.00
Hardin	105	63.00	63.00	21	Diploma	Diploma
Harrison						
Henry						
Highland						
Hocking						
Jefferson						

Knox	115	138 00	51 00	35	55 40	22 45
Lake	193	148 75	54 75	3	1 50	1 50
Lawrence						
Licking						
Logan						
Lorain						
Lucas	228	267 50	241 00			
Madison						
Manning						
Marion						
Medina				27	153 00	76 00
Meigs						
Mercer	725	200 00	166 00	11	55 00	40 00
Miami	9		90 00			
Monroe						
Montgomery		400 00	296 25			
Morgan	5	7 50	7 50			
Morrow						
Muskingum						
Noble						
Paulding				7	98 00	27 00
Perry	1	165 00	30 00			
Pike						
Portage						
Preble	29	41 50	36 50			
Putnam	3,000	500 00	422 32			
Richland						
Ross				26	49 00	27 00
Sandusky		250 00	250 00	27	25 00	25 00
Scioto	11	27 00	17 00	18	77 00	65 00
Seneca						
Shelby	356	350 00	338 85			
Stark	40	19 25	44 75	8	133 00	46 00
Summit	11	12 00	5 50	10	21 50	12 50
Tumbull						
Tuscarawas	17	60 00	30 00			
Union						
Van Wert	686	890 00	399 02			
Warren						
Washington	0	89 60	35 00			14 00
Wayne	36	27 75	9 75			
Williams	400	520 00	350 00			
Wood	529	738 40	556 90	82	64 00	64 00
Wyandot				853	44 00	18 20
Wyandot				21		

TABLE III.—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1912.

Counties.	When Organized.	Number Members.	Number of acres in Fair Grounds	Are Grounds owned by society or leased.	If owned, cash value.	Indebtedness, first of year.	Are Fair Grounds Buildings insured.	Date of annual election.	Votes cast.	Member of Ohio Fair Managers' Association.
Adams.....	1889	132	16.50	Owned	\$5,000 00	\$2,650 00	No. . .	Last Sat. in Jan.	84	No.
Allen.....	1860	819	36.00	Leased			Yes.	Jan. 3, 1912	119	Yes.
Ashtabula.....	1856	270	30.	Owned	25,000 00	3,000 00	Yes.	Aug. 21	25	Yes.
Athens.....	1851	193	35.	Owned	25,000 00	4,000 00	Yes.	Jan. 4, 1913		
Auglaize.....	1866	108	40.	County	25,000 00	3,000 00	Yes.	Last Sat. in Jan.	110	Yes.
Belmont.....	1848	108	17.50	County			Yes.	Jan. 27, 1912	22	No.
Brown.....	1849	590	20.	Owned	25,000 00		Yes.	Last Sat. in Jan.	143	Yes.
Butler.....	1851	10	57.	Owned	57,000 00		Yes.	Oct. 2	176	
Carroll.....	1850	365	33.	Owned	9,000 00	3,780 00	No. . .	Nov. 23	119	
Champaign.....	1846	53	50.	Owned	15,000 00		Yes.	4th Sat. in Jan.	49	
Clark.....	1852	178	46.33	County	50,000 00	3,500 00	No.	Dec. 14, 1912	36	Yes.
Clermont.....	1848	744	40.	Owned	14,000 00	3,314 44	No. . .	Aug. 23	285	Yes.
Clinton.....	1905		35.	Leased			Yes.	Last Sat. in Dec.	27	
Columbiana.....	1849	518	35.	Owned	25,000 00	5,000 00	Yes.	Nov. 6	142	Yes.
Coshocton.....	1851		38.	Owned	75,000 00	6,848 08	Yes.	Dec. 14, 1912	124	Yes.
Crawford.....	1846	174	72.	County	40,000 00	4,000 00	Yes.	Sept. 12, 1912	67	
Cuyahoga (East).....	1848	196	55.73	Owned			Yes.	Last Sat. in Jan.	21	Yes.
Cuyahoga (West).....	1894	296	40.50	Owned	41,000 00		Yes.	Jan. 28, 1912	367	Yes.
Darke.....	1852	10	50.00	Owned	60,000 00	21,000 00	Yes.	Aug. 30	174	Yes.
Defiance.....	1909	43	34.75	Leased		1,543 77	Yes.	3d Sat. in Jan.	27	Yes.
Delaware.....	1859	45.	26.	Leased		606 73	Yes.	Jan. 27, 1912	49	Yes.
Erie.....	1851	412	45.	Leased			Yes.	Dec. 7, 1912	37	No.
Fairfield.....	1851	680	74.	Owned	350,000 00	17,000 00	Yes.	Last Sat. in Jan.	118	Yes.
Franklin.....	1910	35	31.28	Leased		2,424 48	No. . .	Jan. 27, 1912	33	Yes.
Fulton.....	1857	16	40.	County		1,200 00	Yes.	Jan. 27	94	Yes.
Gallia.....	1910	30	18.	Leased			Yes.	Last Mon. in Jan.		No.
Geauga.....	1831	646	35.	Owned			Yes.	Jan. 27	28	No.
Greene.....	1839	13	39.	Leased		1,700 25	Yes.	Aug. 7, 8, 9	610	Yes.
Guernsey.....	1877	14	28.	Owned	30,000 00	61 71	No. . .	Last Sat. in Jan.	39	No.
Hamilton.....	1851	543	47.	County	100,000 00		Yes.	Jan. 25, 1913		Yes.
Hancock.....	1842	10	70.	Owned	25,000 00		No. . .	Sept. 14	198	Yes.
Hardin.....	1900	30	45.	Owned	6,500 00	3,300 00	No.	Jan. 27, 1912	26	Yes.
Harrison.....	1847	42	35.	Leased		350 00	No.	Jan. 13, 1912	40	Yes.
Henry.....	1910		36.	Leased			No.	Jan. 6, 1913	51	
HIGHLAND.....	1908	68	24.	Leased	3,000 00		No.	Dec. 28, 1912	10	Yes.
Hocking.....	1864	132	25.	Owned		1,285 30	No.	Jan. 18		
Jefferson.....	1871	20	15.	Leased		711 31	Yes.	Dec. 28	11	Yes.
Knox.....	1909	155	45.	Leased		2,529 18	Yes.	Jan. 27	31	No.
Lake.....	1911	829	60.	Owned	6,000 00	2,500 00	Yes.	Jan. 27	36	Yes.
Lawrence.....	1910	41	20.	Owned	100,000 00		Yes.	Oct. 29	207	Yes.
Licking.....	1852	12	68.	Owned	26,000 00	6,584 00	Yes.	Last Sat. in Jan.	150	Yes.
Logan.....	1850	18	37.50	Owned			Yes.			

Lorain	1845	217	31.	Owned	60,000 00	4,562 06	Yes	Jan. 27	66	Yes.
Lucas	1870	123	43.62	Owned	100,000 00	20,000 00	Yes	Jan. 27, 1912	41	Yes.
Madison	1889	1,210	47.	Owned	25,000 00	504 83	Yes	Jan. 2	23	Yes.
Marion	1846	10	50.	Owned	15,000 00		Yes	Nov. 6	25	No.
Marion	1851		47.	County			Yes	Jan. 27, 1912		No.
Medina	1845	940	27.75	Owned	10,000 00		No.	Jan. 27, 1912	50	No.
Megs	1855	34	72.	Owned	7,500 00		Yes	Oct. 26	34	No.
Mercer	1860	15	57.	Owned	35,000 00		Yes	Aug. 23, 1912	481	Yes.
Miami	1846	24	52.	County	3,500 00		Yes	General election		Yes.
Monroe	1851	117	35.	Owned	20,000 00	7,400 00	No.	Last Sat. in Jan.	45	No.
Montgomery	1890	22	42.	County	200,000 00		Yes			Yes.
Morgan	1853	125	23.49	Owned	6,200 00		Yes	Last Sat. in Jan.	19	No.
Morrow	1850		35.	Owned	16,000 00	3,150 00	Yes	Oct. 12	203	Yes.
Muskingum			44.	Owned	75,000 00	4,700 00	Yes	Last Sat. in Jan.	33	Yes.
Noble	1852	25	10.71	Owned	2,000 00	21,000 00	No.	Jan. 27	14	No.
Paulding	1872	848	33.	Owned	14,000 00		Yes	Sept. 13, 1912	31	Yes.
Perry	1895	154	20.00	Leased		1,500 00	Yes	Jan. 27, 1912	20	Yes.
Pike	1907	49	40.	Leased		782 26	Yes	Jan. 8, 1913	28	
Portage	1846		46.71	Owned	30,500 00		Yes	Jan. 27		Yes.
Preble	1850	13	43.	County	25,000 00	7,628 68	Yes	Sept. 27, 1912	235	Yes.
Putnam	1850	334	40.	Owned	40,000 00	4,487 71	No.	Last Sat. in Jan.	118	Yes.
Richland	1855	88	30.	County	25,000 00	2,300 00	No.	Oct. 26	19	Yes.
Ross	1911	33	67.	Leased	42,000 00		Yes	Jan. 27, 1912	33	No.
Sandusky	1852		46.	Owned		13,400 00	Yes	Jan. 27, 1912	108	No.
Scioto	1899	1,589	25.	Leased		9,800 00	Yes	Jan. 27, 1912	25	
Seneca	1902	480	45.	Leased			Yes	Jan. 23, 1912	40	Yes.
Shelby	1859		43.	County	40,000 00		Yes	Annual election		Yes.
Stark	1849	290	50.	County	75,000 00	12,500 00	Yes	Dec. 14, 1912	33	Yes.
Summit	1849		47.	Owned	65,000 00	20,500 00	Yes	Jan. 27	38	Yes.
Trumbull	1845	314	37.61	Owned	23,000 00	55 00	Yes	Jan. 27	172	No.
Tuscarawas	1850	340	28.	Owned	40,000 00		Yes	4th Sat. in Jan.	157	Yes.
Union	1847	1,371	49.50	Owned	12,000 00	13,800 00	No.	Sept. 8, 1912	109	Yes.
Van Wert	1855	109	54.25	Owned	50,000 00	1,050 00	Yes	Sept. 8, 1912	83	Yes.
Warren	1849	620	33.	Leased	25,000 00	15,150 90	Yes	Jan. 23, 1913		
Washington	1851	32	40.	Owned	20,000 00	2,120 00	No.	Last Sat. in Jan. 1912	37	Yes.
Wayne	1887	215	43.25	County	20,000 00		No.	4th day of Fair	37	Yes.
Williams	1899		61.60	Owned	45,418 84	1,400 00	Yes	Last Sat. in Jan.	26	Yes.
Wood	1872	293	30.	Owned	4,225 00		Yes	Jan. 27, 1912	51	Yes.
Wyandot	1852	86								

TABLE III—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1912—Continued.

Counties.	Cash in Treas- ury at Begin- ning of Year.	Amount Received Gate Admis- sions.	Amount Received Grand Stand Admissions.	Amount Received State per Cap- ita Allowance.	Amount Received County Com- missioners.	Amount Received Class. Entry Fees—	Amount Received Speed. Entry Fees—	Amount Received Stall and Pen Rent.	Amount Received Booth Rents and Privilege Permits.	Amount Received all Other Sources.
Adams	\$353 12	\$1,248 15	\$510 75	\$495 16	\$123 25	\$80 50	\$1,790 00	\$150 50	\$347 50	\$850 80
Allen	4,575 75	5,089 50	2,515 75	800 00	1,500 00	324 75	1,307 50	271 45	1,219 32	474 09
Ashtabula	14 88	4,326 61	228 70	800 00	1,218 00	67 27	514 30	514 30	1,081 30	708 00
Athens	137 85	4,533 72	840 70	624 73	1,500 00	104 10	670 00	98 25	2,640 10	193 00
Beltmont	1,507 25	1,507 25	240 75	800 00	1,500 00	51 50	140 00	55 70	252 45	1,457 00
Brown	7,123 75	8,225 75	1,693 25	496 64	800 00	12 60	865 00	184 75	472 00	152 00
Butler	1,129 89	2,565 65	494 55	527 02	205 27	31 10	602 70	24 00	3,159 50	3,198 88
Carroll	9 57	3,608 19	1,616 65	800 00	1,222 96	394 65	1,370 00	1,180 25	707 60	57 57
Champaign	1,229 89	4,490 50	1,560 50	591 02	1,000 00	5 35	760 00	1,125 00	1,599 25	65 00
Clark	2,424 00	2,424 00	235 25	471 80	1,222 94	675 00	730 00	63 00	1,125 00	37 00
Clermont	3,990 00	3,990 00	612 00	471 80	205 00	8 00	665 00	44 35	750 00	157 38
Columbiana	3,248 05	3,248 05	353 25	800 00	205 00	408 70	515 00	2,074 50	683 00	1,488 77
Coshocton	6,616 00	6,616 00	798 45	602 42	500 00	51 95	515 00	868 00	2,074 50	2,938 75
Crawford	11,138 47	3,150 75	657 00	680 72	750 00	25 25	366 25	442 50	2,074 50	2,938 75
Cuyahoga, East.	1,966 23	2,124 65	308 05	800 00	1,500 00	448 05	435 00	235 25	442 50	2,938 75
Cuyahoga, West.	288 35	2,551 90	415 50	800 00	1,500 00	78 60	1,102 00	52 00	1,944 50	627 00
Darke	304 29	9,195 55	1,800 49	800 00	3,000 00	140 00	434 00	51 25	3,716 55	600 47
Defiance	72 47	2,578 55	571 15	489 96	3,000 00	140 00	434 00	51 25	3,716 55	1,478 56
Delaware	236 40	2,290 75	1,249 50	543 64	750 00	124 15	815 00	66 00	283 00	980 55
Erie	4,478 75	2,984 75	1,249 50	784 02	1,500 00	124 15	815 00	66 00	283 00	980 55
Fairfield	15 00	11,002 75	78 75	800 00	1,500 00	48 05	1,970 50	28 50	3,031 00	2,547 35
Franklin	88 28	3,278 80	745 50	478 28	940 25	104 10	755 00	58 00	3,031 00	2,547 35
Fulton	237 59	1,665 80	178 00	514 90	940 25	104 10	755 00	58 00	1,500 00	1,970 28
Gallia	38 15	2,502 00	544 95	293 40	290 73	7 60	525 00	708 00	292 75	1,970 28
Geauga	1,184 75	4,184 75	695 75	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Greene	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Guernsey	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hamilton	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hancock	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hardin	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Harrison	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hartsville	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Henry	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Highland	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hocking	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Hocking	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Jefferson	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Knox	2,998 05	2,594 00	800 00	594 60	290 73	7 60	525 00	708 00	292 75	1,970 28
Lake	7,792 23	3,042 90	974 70	603 62	1,489 50	116 47	529 50	30 10	1,908 97	16,919 72
Lawrence	854 27	1,861 15	1,574 25	603 62	1,416 56	30 10	200 00	476 35	1,908 97	287 09

Licking	92 43	6,415 35	256 65	800 00	.....	576 71	1,065 00	.....	2,072 50	861 90
Logan	43 30	4,437 60	900 00	601 40	.....	150 20	685 50	.....	1,145 89	3,997 44
Lorain	126 74	3,477 95	388 50	800 00	.....	.....	547 50	.....	888 00	3,337 25
Lucas	296 88	5,675 40	1,311 00	800 00	.....	.....	2,460 00	.....	3,800 00	2,836 92
Madison	.....	5,263 30	.....	398 04	.....	431 54	1,404 00	.....	1,219 50	6,374 45
Marion	10 07	4,537 00	952 75	800 00	.....	244 35	532 50	.....	1,872 50	15 00
Marshall	2,043 04	6,469 05	912 00	679 42	.....	84 60	2,945 00	.....	1,653 50	3,151 45
Medina	1,492 05	2,833 55	329 00	471 86	.....	32 50	457 50	.....	665 15	431 50
Melms	734 25	2,233 25	294 95	511 88	.....	.....	730 00	.....	1,251 90	3,500 00
Mercer	440 37	5,456 25	1,304 90	550 72	.....	173 33	585 00	.....	2,270 00	136 00
Miami	1,858 26	6,020 05	1,151 75	800 00	.....	147 19	2,015 00	.....	4,814 00	240 57
Monroe	69 65	1,524 90	164 50	484 88	.....	132 46	712 50	.....	4,118 00	1,085 52
Montgomery	8,900 00	8,667 00	1,998 65	484 88	.....	55 65	2,286 00	.....	382 35	985 00
Morgan	606 11	1,533 40	.....	321 94	.....	312 00	72 00	.....	965 00	84 83
Morrow	316 29	3,086 50	.....	336 30	.....	134 00	939 00	.....	1,004 00	830 15
Muskingum	79 88	4,833 30	.....	800 00	.....	113 95	945 00	.....	1,004 00	15 00
Noble	47 60	484 20	.....	372 02	.....	127 10	200 00	.....	1,004 00	15 00
Paulding	.....	2,892 65	.....	454 50	.....	162 45	377 50	.....	1,006 00	150 04
Perry	13 75	1,320 50	519 00	707 82	.....	84 75	395 00	.....	1,006 00	250 00
Pike	.....	983 50	127 00	314 46	.....	108 50	325 00	.....	1,303 75	6,130 00
Portage	8 38	4,907 50	888 50	606 14	.....	273 44	625 00	.....	1,687 25	8,133 88
Preble	.....	5,503 75	1,149 00	476 68	.....	91 75	704 00	.....	1,687 25	4,505 61
Putnam	.....	7,076 21	.....	599 44	.....	213 88	600 00	.....	2,866 55	292 15
Richland	.....	2,719 25	.....	800 00	.....	253 70	741 00	.....	776 10	.....
Ross	.....	5,039 75	.....	800 00	.....	253 70	741 00	.....	776 10	.....
Sandusky	934 10	6,018 34	1,310 75	703 19	.....	253 70	741 00	.....	776 10	.....
Schoto	.....	1,495 45	173 00	800 00	.....	253 70	741 00	.....	776 10	.....
Seneca	313 60	3,721 05	1,492 00	800 00	.....	98 20	806 00	.....	893 00	2,000 00
Shelby	732 01	4,911 50	1,861 50	493 86	.....	.....	327 50	.....	1,021 52	213 38
Stark	1,773 02	3,713 42	994 30	800 00	.....	.....	235 00	.....	1,474 62	196 15
Summit	193 36	10,242 60	550 25	800 00	.....	303 60	810 00	.....	2,700 00	1,126 37
Tuscarawas	1,868 33	5,362 80	1,026 50	800 00	.....	341 70	1,887 20	.....	988 86	600 00
Union	106 08	3,512 75	236 50	800 00	.....	11 50	987 50	.....	1,819 75	252 40
Union Vert.	125 56	1,712 00	429 00	437 42	.....	104 30	540 00	.....	1,150 50	244 00
Warren	183 83	2,088 60	1,318 80	382 38	.....	148 10	431 69	.....	1,489 25	1,671 00
Washington	169 50	2,062 45	406 70	800 00	.....	37 70	838 50	.....	2,657 42	12,512 32
Wayne	893 66	4,294 25	471 60	800 00	.....	304 80	362 50	.....	1,489 25	1,695 13
Williams	6 86	2,611 80	264 25	800 00	.....	403 56	757 50	.....	665 50	4,730 54
Wood	114 70	7,326 25	1,255 00	800 00	.....	8 00	325 55	.....	804 00	1,500 00
Wyandot	26 45	1,928 00	131 25	415 20	.....	479 20	2,865 00	.....	8,191 30	763 95
					.....	108 75	185 25	.....	542 00	.....

TABLE III—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1912—Continued.

Counties.	Amount Paid Premiums— Classes.	Amount Paid Premiums— Speed.	Amount Paid Newspapers, Advertising.	Amount Paid Other Listing.	Amount Paid Printing.	Amount Paid Supplies.	Amount Paid Postage.	Amount Paid Special Attrac- tions.	Amount Paid Music.	Amount Paid Judges.	Amount Paid Police Force.
Adams	\$1,213 50	\$3,580 00	\$48 85	\$86 50	\$78 00	\$8 00	\$12 00	...	\$95 00	\$82 90	\$34 50
Allen	2,044 75	2,465 00	359 80	358 86	347 00	271 82	90 00	\$37 00	280 00	142 00	173 00
Ashtabula	1,817 00	1,889 00	79 14	278 80	150 00	90 70	22 15	352 50	227 20	139 60	143 50
Athens	1,093 97	2,380 45	...	501 86	...	...	...	...	160 00	380 25	...
Auglaize	673 50	795 00	150 00	95 90	140 00	96 50	34 20	200 00	100 00	130 80	116 00
Belmont	1,731 00	4,000 00	94 50	29 00	59 00	65 76	4 45	282 68	154 00	56 50	6 00
Brown	2,911 38	1,760 66	266 80	65 00	288 65	109 11	6 45	30 00	150 00	69 00	...
Butler	1,769 00	2,810 00	96 18	31 15	50 00	90 11	85 00	...	129 00	169 00	154 00
Champaign	1,877 60	2,395 00	182 72	203 55	110 71	30 20	22 27	...	110 00	107 00	60 00
Clark	2,664 92	2,395 00	316 25	165 78	30 00	108 68	41 00	125 00	145 00	162 80	90 00
Clermont	1,419 10	1,030 00	16 00	39 90	110 00	45 65	11 25	1,225 00	171 00	167 00	420 10
Columbiana	3,685 00	1,475 00	180 00	220 00	140 00	100 00	40 00	250 00	124 80	87 75	95 00
Coshocton	1,198 25	1,575 00	76 60	9 83	276 75	...	...	...	515 00	80 00	160 00
Crawford	3,714 90	2,085 00	193 80	144 00	...	253 25	18 96	...	152 50	46 00	102 00
Cuyahoga, East.	2,218 45	2,115 00	54 00	154 00	62 00	12 00	11 00	100 00	199 00	210 15	136 00
Cuyahoga, West.	1,211 15	1,760 50	58 45	12 00	26 84	305 88	21 19	...	75 00	56 95	66 60
Darke	1,732 85	1,625 00	21 42	44 50	48 28	...	...	51 25	74 00	67 10	90 00
Defiance	3,099 42	2,857 50	253 19	627 15	432 25	143 72	40 49	435 00	505 00	214 80	500 00
Delaware	1,236 80	2,236 80	515 20	...	30 00	147 24	48 00	612 00	225 00	86 10	96 00
Erie	460 73	150 00	14 00	38 50	26 60	7 75	22 55	51 00	...	...	86 55
Euclid	997 85	2,269 60	542 15	...	118 69	521 62	53 22	445 00	112 50	100 65	51 50
Fairfield	4,569 75	2,900 00	97 00	197 80	122 75	684 00	...	...	110 00	209 75	472 00
*Franklin	\$824 25	1,049 89	107 01	89 33	132 75	135 57	21 75	...	100 00	74 50	107 00
Fulton	1,917 55	2,432 50	60 00	260 15	107 00	58 40	49 30	...	95 00	136 50	138 00
Gallia	811 10	1,263 75	232 13	386 93	123 90	81 00	12 00	150 00	78 00	47 40	75 00
Geauga	1,341 45	1,255 00	75 85	135 95	68 25	39 35	28 64	191 00	75 00	106 65	99 25
Greene	3,236 75	1,900 00	237 00	130 00	139 00	100 00	22 50	...	126 00	216 50	128 00
Guernsey	3,985 17	1,134 55	45 95	25 05	14 47	58 00	7 00	235 00	112 00	75 00	65 50
Hamilton	1,072 50	3,394 50	488 97	712 25	83 39	133 55	50 00	613 00	237 00	238 05	193 93
Hancock	1,364 25	2,075 00	115 00	351 81	175 00	90 00	35 00	35 00	100 00	90 00	95 00
Hardin	1,318 55	2,650 00	136 80	114 85	...	99 60	24 50	400 00	72 00	119 75	89 75
Harrison	557 30	850 00	25 00	72 80	87 55	59 93	20 00	...	97 90	50 50	43 50
Highland	1,664 60	1,790 80	363 89	38 70	...	...	18 87	700 00	217 05	38 50	107 00
Hocking	815 05	1,940 00	115 60	22 60	152 00	65 62	18 87	...	182 59	39 50	54 75
Jackson	138 00	1,072 50	128 40	94 10	...	36 77	...	800 00	169 80	30 00	58 33
Jennison	1,389 20	1,255 00	10 20	...	...	292 00	10 80	...	125 00	90 00	72 50
Knox	1,092 55	1,899 00	166 98	184 65	190 50	103 88	27 50	235 00	206 00	90 00	48 00
Lake	2,816 25	2,560 00	516 14	524 45	625 18	433 10	26 78	249 70	309 00	151 05	357 50
Lawrence	983 75	1,150 00	45 00	24 00	50 00	30 00	5 51	...	125 00	...	66 00

Licking	2,968 15	2,600 00	1,000 00	169 44	138 76	199 53	15 00	1,212 00	152 00	133 65	116 25
Logan	1,928 11	4,706 50	319 53	100 00	93 20	.....	93 20	1,000 00	350 00	145 60	115 99
Lorain	2,128 65	1,597 50	146 03	115 00	118 15	.....	12 50	62 80	128 60	108 50	233 50
Louis	3,682 85	5,020 00	300 00	176 65	125 00	81 00	28 00	150 00	224 00	319 83	371 65
Madison	2,497 05	3,600 00	100 00	30 00	180 00	118 35	20 00	.....	222 50	162 55	77 00
Manning	2,343 20	2,900 00	295 50	75 00	319 00	.....	33 50	.....	225 00	125 00	95 00
Martin	3,119 40	5,100 00	369 00	294 34	107 95	100 75	17 00	250 00	175 00	219 30	900 25
Medina	1,531 40	1,500 75	36 00	55 50	147 98	150 75	12 00	235 00	92 50	104 00	52 50
Melgs	774 80	1,590 00	133 14	193 39	17 98	64 80	20 81	298 12	74 00	151 00	131 50
Mercer	2,962 27	2,832 50	435 00	357 00	30 00	.....	145 00	200 00	194 00	180 00	240 00
Miami	3,741 30	3,590 00	229 00	140 00	138 50	219 00	23 30	250 00	200 00	190 00	292 00
Monroe	4,012 00	6,800 00	437 80	599 25	363 25	154 80	81 00	185 00	119 00	54 50	54 00
Montgomery	2,932 30	2,715 00	156 80	113 50	118 00	.....	10 00	1,325 00	323 00	335 00	405 00
Morgan	2,143 85	2,400 00	120 00	110 00	118 00	20 00	15 83	367 50	65 00	77 80	25 00
Morrow	2,252 36	2,375 00	591 70	362 35	6 75	70 49	11 08	197 50	125 00	116 65	68 00
Muskingum	1,384 25	400 00	16 35	35 90	30 75	3 00	4 00	30 00	206 75	158 45	213 15
Noble	1,195 00	2,260 00	15 00	257 35	209 05	57 50	34 00	200 00	113 50	38 20	36 00
Paulding	529 50	1,860 00	67 75	170 40	.....	.....	10 50	.....	120 40	50 00	32 00
Perry	414 60	1,100 50	53 75	116 15	80 00	32 65	24 21	.....	128 00	32 00	13 75
Pike	2,963 70	2,008 65	50 00	533 12	250 00	.....	50 00	780 75	340 00	137 80	301 89
Portage	3,313 20	2,237 00	82 80	287 31	484 85	608 27	10 00	290 00	300 00	169 00	286 80
Preble	3,085 32	3,000 00	300 00	192 30	327 65	.....	31 60	500 00	300 00	200 00	89 25
Putnam	1,330 50	1,278 00	230 73	56 97	260 87	28 00	29 00	.....	158 90	88 15	63 00
Richland	1,205 75	3,200 00	144 90	202 12	96 10	219 85	10 00	900 00	150 00	66 00	107 00
Ross	3,104 73	2,456 00	174 14	397 35	.....	.....	37 00	337 50	300 00	177 20	542 15
Sandusky	1,030 45	1,230 00	124 80	.....	93 30	83 80	10 00	275 00	65 00	36 00	27 00
Scioto	2,033 41	1,227 50	125 88	543 22	9 35	684 08	52 05	375 85	164 40	345 90	233 00
Seneca	1,767 05	2,730 00	.....	.....	.....	659 12	33 00	150 00	150 00	198 05	87 50
Shelby	2,906 40	1,740 00	121 65	54 42	59 30	70 76	45 60	100 00	287 57	78 10	69 00
Stark	3,483 75	3,467 50	210 10	63 55	243 00	709 33	45 60	350 00	320 00	148 90	439 00
Summit	2,003 45	2,060 00	218 51	113 63	125 95	185 75	14 00	.....	147 20	64 40	34 10
Trumbull	1,035 55	1,320 00	94 70	140 00	.....	30 05	16 25	.....	42 50	119 10	119 75
Tuscarawas	1,469 04	2,226 29	.....	.....	461 44	.....	50 00	.....	.....	136 50	139 00
Union	4,138 27	3,495 50	215 00	443 00	120 00	139 74	31 20	248 38	365 50	187 95	133 50
Van Wert	918 25	2,085 00	19 90	125 10	264 70	49 68	15 00	.....	130 00	64 50	93 50
Warren	1,140 75	1,719 60	89 95	213 80	113 83	266 85	47 00	.....	126 00	57 50	269 75
Washington	2,232 20	1,700 00	303 81	62 30	128 00	100 66	15 00	510 00	85 00	116 50	77 00
Wayne	2,401 48	2,136 50	83 20	.....	40 00	236 21	16 00	300 00	171 00	124 00	154 25
Williams	5,143 65	5,910 00	285 00	350 00	60 00	38 50	73 20	300 00	190 00	272 85	500 00
Wood	1,153 71	185 25	80 85	78 35	25 30	55 85	9 11	220 00	130 00	105 85	77 00
Wyandot	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

B. of A.

TABLE III.—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1913—Concluded.

Counties.	Amount Paid Expenses of Members.	Amount Paid President or Secretary for tending Annual State Meeting.	Amount Paid Secretary.	Amount Paid Treasurer.	Amount Paid Than Above.	Amount Paid Current Expenses, Other Than Above.	Amount Paid Real Estate, Buildings and Improvements.	Amount Paid Old Indebtedness.	Balance in Treasury.	Amount of Unpaid Bills and Accounts.
Adams	\$58 50	\$50 00	\$50 00	\$25 00	\$65 25	\$142 96	\$195 26	\$147 00	\$12 24	.....
Allen	433 00	25 00	600 00	150 00	196 63	817 66	778 70	.....	1,435 74	.....
Ashstabula	234 55	21 28	200 00	50 00	358 25	862 55	2,409 45	.....	370 57	\$91 74
Athens	891 77	15 00	450 00	50 00	100 00	.....	1,258 45	1,289 26	364 50	.....
Auglaize	252 00	22 50	300 00	60 00	248 00	.....	401 45	2,068 23	.....	1,788 99
Belmont .....	.....	.....	150 00	.....	.....	275 73	.....	1,561 41	21 13	.....
Brown	250 00	26 05	120 00	75 00	129 50	337 55	129 10	.....	1,121 16	.....
Butler	950 40	16 00	350 00	125 00	375 00	238 42	1,233 73	.....	11,443 98	.....
Carroll	270 00	.....	125 00	50 00	198 51	3,351 66	500 00	.....	.....	.....
Champaign .....	.....	12 00	225 00	.....	117 00	518 55	204 38	.....	1,889 42	.....
Clark	386 50	12 00	200 00	100 00	620 25	485 43	1,235 41	2,656 00	.....	.....
Clermont	282 70	19 85	125 00	60 00	145 25	153 74	1,473 09	2,656 00	91 52	.....
Clinch	50 00	10 00	50 00	25 00	112 00	125 00	796 29	441 00	.....	.....
Columbia	397 60	7 00	318 00	.....	124 75	1,413 90	.....	500 00	* 48 73	.....
Coshocton	309 50	.....	300 00	62 50	133 60	2,293 60	918 12	1,150 00	153 73	5,750 00
Crawford	607 50	.....	250 00	50 00	32 18	619 08	11,830 47	1,300 00	1,006 96	.....
Cuyahoga, East	97 43	100 00	150 00	35 00	376 90	288 12	357 00	.....	1,223 24	.....
Cuyahoga, West	178 00	9 95	200 00	.....	85 50	955 34	2,248 08	800 00	29 03	2,100 00
Dare	1,184 30	49 00	250 00	50 00	1,339 87	1,893 13	703 32	4,535 00	2,929 73	18,000 00
Defiance .....	.....	8 45	300 00	40 00	204 00	381 63	.....	3,131 85	* 53 52	.....
Delaware .....	.....	.....	.....	.....	.....	.....	.....	606 73	9 37	3,353 90
Erie	40 40	20 00	400 00	150 00	200 28	410 07	1,401 31	.....	98 87	.....
Fairfield	40 43	7 00	500 00	.....	.....	273 08	1,206 84	.....	7,807 95	.....
Franklin	50 50	.....	.....	100 00	190 70	659 40	3,171 12	2,000 00	.....	824 25
Fulton .....	.....	11 50	220 00	.....	143 25	775 73	1,912 51	2,506 35	59 19	.....
Galla .....	.....	.....	.....	.....	163 95	430 41	1,859 90	700 00	61 16	.....
Geauga	35 75	13 00	140 00	.....	156 55	607 88	689 37	701 56	.....	85 46
Greene .....	.....	.....	150 00	25 00	374 50	.....	.....	.....	1,328 04	.....
Guernsey	154 80	8 10	150 00	10 00	81 00	499 16	1,050 85	1,700 25	318 24	.....
Hamilton	189 50	42 50	450 00	250 00	1,063 00	2,169 19	1,763 03	2,333 89	61 71	.....
Hancock .....	.....	275 00	.....	.....	118 00	898 00	255 00	.....	1,993 66	.....
Hardin	50 98	9 90	225 00	60 00	432 00	555 37	616 24	.....	428 04	.....
Harrison	190 92	15 00	125 00	25 00	79 70	154 16	370 00	.....	495 68	.....
Henry	105 10	20 00	200 00	20 00	36 00	2,324 48	214 50	363 57	17 27	.....
Highland	44 45	14 70	100 00	.....	138 00	990 80	80 38	.....	340 24	264 40
Hocking .....	.....	.....	.....	.....	108 50	54 70	.....	1,285 30	.....	287 43
Jefferson .....	.....	22 00	125 00	60 00	176 75	245 35	290 34	711 31	684 43	1,570 85
Knox .....	.....	2 80	200 00	25 00	256 56	480 87	150 00	600 50	.....	2,723 28
Lake	68 80	.....	200 00	50 00	541 96	334 84	23,677 95	.....	820 62	41,024 00

REPORT OF COUNTY SOCIETIES.

259

Lawrence	222 00	13 00	50 00	73 03	9 81	736 35	187 76	1,050 00	496 21	.....
Licking	.....	.....	350 00	50 00	370 25	696 86	2,039 04	222 42	489 19	23 60
Legan	.....	.....	† 800 00	† 100 00	223 74	1,909 75	.....	676 40	400 00	.....
Lorain	117 00	15 00	200 00	135 00	129 50	2,127 83	240 00	.....	554 28	.....
Lucas	.....	12 50	450 00	.....	1,674 57	778 57	729 69	5,317 39	121 02	2,500 00
Madison	659 50	10 00	150 00	150 00	250 00	1,150 91	1,000 00	.....	* 177 90	.....
Mahoning	735 00	44 00	300 00	100 00	398 60	614 86	4,585 00	3,339 97	150 35	.....
Marion	18 40	20 00	350 00	100 00	176 25	868 95	1,594 31	.....	1,043 34	.....
Medina	130 00	30 00	110 00	50 00	29 00	573 80	4,609 87	.....	16 48	.....
Melgs	360 00	15 00	200 00	100 00	41 95	399 29	2,068 14	852 00	.....	3,000 00
Mercer	.....	18 00	450 00	50 00	75 00	658 98	4,279 55	.....	993 72	150 00
Miami	340 60	6 20	200 00	100 00	316 00	563 20	594 00	.....	4,508 50	23 00
Monroe	.....	.....	80 00	.....	88 50	442 75	485 40	850 00	.....	.....
Montgomery	1,094 50	3 40	600 00	500 00	530 90	362 50	3,300 00	.....	8,080 00	.....
Morgan	.....	3 50	75 00	23 00	139 88	199 04	2,187 94	120 33	392 22	.....
Morrow	160 00	11 35	200 00	35 00	300 70	2,321 27	1,79 24	3,886 00	.....	100 00
Muskingum	217 90	7 80	250 00	.....	55 80	408 17	1,061 13	2,013 00	.....	719 25
Noble	100 00	15 00	50 00	50 00	204 75	91 88	257 94	445 70	42 49	.....
Paulding	5 25	.....	150 00	50 00	72 00	869 39	586 47	285 84	20 30	.....
Perry	112 00	10 00	125 00	30 00	.....	141 27	355 00	733 94	.....	351 40
Pike	.....	.....	.....	.....	332 17	107 05	354 46	62 43	.....	.....
Portage	.....	10 50	600 00	.....	984 00	3,719 07	2,748 10	1,438 17	5 06	.....
Preble	939 75	22 00	225 00	75 00	389 05	871 28	988 36	315 00	* 763 14	.....
Putnam	590 00	10 00	300 00	50 00	329 23	5,827 89	1,871 20	76 75	.....	5,493 15
Richland	32 20	10 00	257 50	.....	156 85	743 24	6,000 00	2,421 56	.....	.....
Ross	.....	.....	100 00	100 00	235 15	52 20	1,200 00	719 53	.....	.....
Sandusky	.....	.....	200 00	25 00	406 85	899 81	1,503 40	177 66	948 37	.....
Scioto	.....	.....	.....	.....	67 00	.....	1,179 35	9,500 00	164 25	2,093 90
Seneca	383 85	.....	200 00	120 00	.....	174 56	1,293 44	1,000 00	501 76	.....
Shelby	.....	.....	300 00	35 00	199 00	477 36	1,432 13	687 50	259 19	.....
Stark	514 45	8 00	300 00	25 00	1,540 61	2,630 32	939 86	20,500 00	1,824 18	50 00
Summit	512 80	12 65	300 00	250 00	182 25	204 82	1,820 36	.....	4,369 50	.....
Trumbull	136 25	13 80	225 00	70 00	171 50	409 00	783 40	2,296 75	1,113 09	.....
Tuscarawas	135 60	10 00	300 00	50 00	433 75	2,318 41	156 19	.....	8,010 63	.....
Union	139 00	.....	200 00	50 00	.....	.....	13,245 51	1,900 00	349 20	.....
Van Wert	213 00	11 00	200 00	75 00	84 00	1,668 26	1,200 63	1,000 00	28 75	.....
Warren	.....	12 00	† 335 00	.....	707 90	1,502 99	5,542 88	5,542 88	108 41	.....
Washington	.....	13 10	.....	.....	70 00	1,594 01	4,000 00	560 03	141 51	.....
Wayne	.....	12 00	200 00	65 00	206 28	570 00	721 00	.....	* 41 25	.....
Williams	342 00	.....	200 00	.....	138 00	2,307 64	957 08	.....	514 98	.....
Wood	55 00	25 00	550 00	20 00	46 00	341 49	991 50	3,595 00	345 00	3,225 00
Wyandot	.....	.....	100 00	.....	.....	.....	.....	.....	.....	.....

* Overdraft.
† Not paid.
‡ 1911 and 1912.

TABLE III.—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1912—Continued.

Counties.	Total Number of exhibitors.	Date of payment of premiums.	Are entries open or confined to county?	How are premium awards published?	Do you publish annual financial statement?	Do you sell family tickets?	Cost of membership ticket.	Number of premium lists issued.	What charge is made for merchants exhibit space?	What charge is made for machinery exhibit space
Adams.....	290	On demand.	Open....	Not published	No.....	Yes.....	\$1 50	2,500	None.....	None.
Allen.....	290	Oct. 7, 1912.	Open....	Newspapers	Yes.....	No.....	1 00	4,000	50c. per front ft.	25c. per front ft.
Astabula.....	271	Oct. 1.....	Open....	Newspapers	Yes.....	No.....	1 00	1,000	None.....	None.
Attens.....	1,437	Oct. 11, 1912.	Open....	Newspapers	Yes.....	No.....	1 00	2,000	None.....	None.
Augaize.....	198		Both....	Newspapers	Yes.....	No.....	1 00	5,000	\$2.00 for exhibitor's ticket.	\$2.00 for exhibitor's ticket.
Belmont.....	90	Oct. 10, 1912	Open....	Newspapers	Yes.....	No.....	1 00	1,000	None.....	None.
Brown.....	350	At once....	Open....	Newspapers	Yes.....	Yes.....	1 50	1,500	None.....	None.
Butler.....	4,041	At once....	Open....	Newspapers	Yes.....	No.....	1 00	5,000	\$1.00 per ft. in Art hall.	None.
Carroll.....	139	Nov. 2.....	Open....	Newspapers	Yes.....	No.....	1 00	2,500	None.....	None.
Champaign.....	260	Aug. 16-24.	Partly..	Newspapers	Yes.....	No.....	1 00	2,300	None.....	None.
Clark.....	129	August.....	Open....	Newspapers	Yes.....	No.....	1 00	2,500	\$10.00 for space 9 x 16.	None.
Clermont.....	117	Aug. 23....	Open....	Newspapers	Yes.....	Yes.....	1 25	3,500	None.....	None.
Clinton.....	840	Sept. 6.....	Open....	Newspapers	Yes.....	Yes.....	1 25	3,000	None.....	None.
Columbiana.....	158	Oct. 4.....	Open....	Newspapers	Yes.....	No.....	1 00	4,000	None.....	None.
Cushacton.....	169	Oct. 19, 1912	Open....	Not published	Yes.....	No.....	1 00	3,000	None.....	None.
Crawford.....	132	Oct. 10, 1912	Open....	Not published	Yes.....	No.....	1 00	2,000	None.....	None.
Cuyahoga (East)	103	Within 60 days	Open....	Newspapers	Yes.....	No.....	1 00	2,500	None.....	None.
Cuyahoga (West)	275	Sept. 24, 1912	Open....	Not published	No.....	Yes.....	1 00	4,000	None.....	None.
Darke.....	250	Aug. 30-Sept. 4, 5	Both....	Not published	Yes.....	No.....	1 00	3,000	\$5.00 for space 10x15	None.
Defiance.....	290	Sept. 27, 1912	Open....	Newspapers	Yes.....	No.....	1 00	1,000	None.....	None.
DeWaire.....	327	Oct. 15....	Both....	Newspapers	Yes.....	Yes.....	1 00	9,000	None.....	None.
Erle.....	366	Sept. 24, 1912	Both....	Newspapers	Yes.....	No.....	1 00	1,000	15c. per square ft.	None.
Fairfield.....	104	Last day of Fair.	Both....	Newspapers	Yes.....	No.....	25	2,500	None.....	None.
Franklin.....	190	After Oct. 15	Open....	In total	Yes.....	No.....	25	1,000	\$2.00 each in flora hall.	None.
Fulton.....	928	Sept. 14, 1912	Open....	Newspapers	Yes.....	No.....	1 00	2,500	None.....	None.
Ga.	198	Before Nov. 16	Open....	Newspapers	Yes.....	No.....	1 00	3,500	None.....	None.
Greene.....	324	Week of Fair.	Both....	Newspapers	Yes.....	Yes.....	1 00	3,500	None.....	None.
Guernsey.....	182	Dec. 15....	Open....	Newspapers	Yes.....	No.....	1 00	1,000	None.....	None.
Hamilton.....	161	Aug. 19....	Open....	Newspapers	Yes.....	No.....	1 50	7,000	\$1.00 per front ft.	None.
Hancock.....	167	10 days after Fair.	Open....	Newspapers	Yes.....	Yes.....	1 00	1,500	None.....	None.
Hardin.....	181	Before Dec. 1, 1912	Both....	Newspapers	Yes.....	Yes.....	1 00	2,000	None.....	None.
Harrison.....	88	Oct. 3, 4, 22	Open....	Newspapers	Yes.....	Yes.....	1 00	1,000	None.....	None.
Henry.....	181	Sept. 6, Dec. 1	Open....	Newspapers	Yes.....	No.....	25	2,000	\$2.50 to \$5.00	\$2.50 to \$5.
Highland.....	142	Oct. 23....	Open....	Newspapers	Yes.....	Yes.....	1 00	3,000	None.....	None.

Hocking	41	Dec. 15, 1912	Open.	Newspapers	Yes.	No.	1 00	1,500	None.	None.	50c. per front ft. in hall.
Jefferson		Oct. 12	Open.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Knox	171	Nov. Dec. 1	Both.	Newspapers	Yes.	No.	1 00	1,000	None.	None.	
Lake	365	After Fair	Open.	Newspapers	Yes.	No.	1 00	3,000	7c. per square ft.	None.	
Lawrence	108	Aug. 26	Open.	Not published	Yes.	No.	1 00	2,000	\$10.00	\$10.00.	
Licking	127	Oct. 15	Open.	Newspapers	Yes.	No.	1 00	3,000	None.	None.	
Logan		10 days after Fair	Both.	Newspapers	Yes.	No.	1 00	3,500	None.	None.	
Lorain	117	Sept. 13	Open.	Newspapers	Yes.	No.	1 50	1,000	None.	None.	
Lucas	227	Sept. 30	Open.	Yearly report	Yes.	No.	1 00	10,000	None.	None.	
Madison	259	Aug. 30	Both.	Newspapers	Yes.	No.	1 00	3,000	None.	None.	
Mahoning	117	Sept. 27	Open.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Marion	89	Oct. 7, 1912, Jan. 1, 1913	Both.	Not published	Yes.	No.	1 00	2,500	None.	None.	
Medina	225	Before Jan. 1, 1913	Open.	Newspapers	Yes.	No.	1 00	1,500	None.	None.	
Meigs	103	Oct. 1	Open.	Newspapers	Yes.	No.	1 00	4,000	None.	None.	
Mercer	227	Aug. 24, 1912	Both.	Newspapers	Yes.	No.	1 00	3,000	None.	None.	
Miami	276	Oct. 1	Both.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Monroe	180	After Fair	Open.	Newspapers	Yes.	No.	1 00	4,000	None.	None.	
Montgomery	568	Close of Fair	Open.	Newspapers	No.	No.	1 00	1,500	None.	None.	
Morgan	134		Both.	Newspapers	Yes.	No.	1 00	2,500	None.	None.	
Morrow	225	Oct. 14 to Jan. 1	Both.	Newspapers	Yes.	No.	1 00	1,000	None.	None.	
Muskingum	105	Oct. 1	Both.	Newspapers	Yes.	No.	1 00	500	None.	None.	
Noble	37	Oct. 15	Open.	Not published	Yes.	No.	1 00	3,000	None.	None.	
Paulding	150	Sept. 13, 1912	Both.	Statement	Yes.	No.	25	2,000	None.	None.	
Perry	82	Jan. 17, 1912	Open.	Catalogue	No.	Yes.	25	2,000	None.	None.	
Pike	648	Aug. 10 to Jan. 1	Open.	Newspapers	Yes.	No.	1 00	4,000	None.	None.	
Portage	201	Oct. 18, 1912	Open.	Newspapers	Yes.	No.	1 00	3,500	\$5.00 to \$15.00	None.	
Preble	250	Sept. 27, 1912	Open.	Newspapers	Yes.	No.	1 00	3,000	None.	None.	
Putnam	3,000	Dec. 1, 1912	Both.	Newspapers	Yes.	No.	1 00	2,000	None.	Membership ticket.	
Richland	70	Sept. 14, 1912	Open.	Not published	No.	No.	1 00	2,500	None.	None.	
Ross	167	Aug. 24, 1912	Open.	Newspapers	Yes.	Yes.	1 00	3,000	\$2.00 to \$5.00	None.	
Sandusky	195	Oct. 1, 1912	Both.	Newspapers	Yes.	No.	1 50	1,000	None.	None.	
Scioto	196	Aug. 16 to Jan. 30, 1913	Open.	Newspapers	Yes.	No.	1 00	3,000	None.	None.	
Seneca	185	Oct. 1, 1912	Both.	Not published	Yes.	Yes.	1 00	2,000	None.	None.	
Shelby	250	Oct. 1, 1912	Open.	Newspapers	Yes.	No.	1 00	3,500	50c. to \$1.00 per ft.	None.	
Stark	200	Oct. 18, 1912	Both.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Summit	205	Oct. 5 to Jan. 1	Both.	Newspapers	Yes.	No.	50	5,000	\$10.00 to \$100.00	None.	
Trumbull	189	Oct. 10	Open.	Newspapers	Yes.	No.	1 00	1,800	None.	None.	
Tuscarawas	91	Oct. 21	Open.	Not published	Yes.	No.	1 00	5,000	\$3.00	\$3.00.	
Union		Oct. 26, 1912	Open.	Catalogue	Yes.	No.	1 00	4,000	None.	None.	
Van Wert	318	Last day of Fair	Both.	Not published	Yes.	Yes.	1 00	3,500	None.	None.	
Warren	85	10 days after Fair	Both.	Newspapers	Yes.	No.	25	2,000	None.	None.	
Washington		Dec. 17, 1912	Open.	Newspapers	Yes.	No.	1 00	3,500	None.	None.	
Wayne	150	Nov. 1	Open.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Williams	299	Nov. 1	Open.	Newspapers	Yes.	No.	1 00	2,000	None.	None.	
Wood	293	Last day of Fair	Open.	Newspapers	Yes.	No.	1 00	1,800	None.	None.	
Wyandot	110	Nov. 1, 1912	Open.	Not published	Yes.	No.	1 00	1,250	None.	None.	

TABLE III.—PROPERTY, RECEIPTS, DISBURSEMENTS, ETC., OF COUNTY AGRICULTURAL SOCIETIES IN 1912—Concluded.

Counties.	Do you have Grange Exhibits?	Do you have an Educational Hall?	What is nature of premiums in Educational Department?	Do you have Ladies' and Children's Day?	Do County Commissioners furnish office room?	Has Society Complied with Laws and Rules of Board of Agriculture?	Was Prescribed Oath administered to Officers and Directors?	Does Society hold Summer Picnic?	Member of which Trotting Association.
Adams.....	No.....	No.....	Cash.....	Children's.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Allen.....	Yes.....	Yes.....	Cash and free trips.....	No.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Ashtabula.....	No.....	No.....	Books.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Athens.....	No.....	Yes.....	.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Auglaize.....	Yes.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Belmont.....	No.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Brown.....	No.....	No.....	.....	No.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Butler.....	No.....	No.....	.....	No.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Carroll.....	No.....	Yes.....	Cash.....	Children's.....	No.....	Yes.....	Yes.....	No.....	National.....
Champaign.....	No.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	National.....
Clark.....	No.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	National.....
Clermont.....	No.....	Yes.....	Cash.....	No.....	No.....	Yes.....	Yes.....	No.....	American.....
Clinton.....	No.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Columbiana.....	No.....	No.....	.....	No.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Coshocton.....	Yes.....	Yes.....	Cash.....	Yes.....	No.....	Yes.....	No.....	No.....	National.....
Crawford.....	No.....	Yes.....	Cash.....	Yes.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Cuyahoga (East).....	Yes.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Cuyahoga (West).....	Yes.....	Yes.....	Cash.....	No.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Darke.....	No.....	Yes.....	Special.....	Yes.....	No.....	Yes.....	Yes.....	No.....	National.....
Defiance.....	No.....	Yes.....	.....	Yes.....	No.....	Yes.....	Yes.....	No.....	American.....
Delaware.....	No.....	No.....	Cash.....	Children's.....	No.....	Yes.....	Yes.....	No.....	Ohio Fair Circuit.....
Erie.....	No.....	Yes.....	.....	No.....	Yes.....	Yes.....	Yes.....	Yes.....	American.....
Fairfield.....	Yes.....	No.....	Medals and diplomas.....	Children's.....	No.....	No.....	Yes.....	No.....	National.....
Franklin.....	Yes.....	Yes.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Fulton.....	No.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Gallia.....	No.....	No.....	Cash.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Geauga.....	No.....	Yes.....	Books and cash.....	Children's.....	Yes.....	Yes.....	Yes.....	No.....	National.....
Greene.....	No.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	American.....
Guernsey.....	No.....	No.....	Books.....	Yes.....	No.....	Yes.....	Yes.....	No.....	American.....
Hamilton.....	No.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	National.....
Hancock.....	Yes.....	No.....	.....	Yes.....	No.....	Yes.....	Yes.....	No.....	National.....
Hardin.....	No.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	National.....
Henry.....	No.....	No.....	.....	Yes.....	No.....	Yes.....	Yes.....	No.....	American.....
Highland.....	No.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Hocking.....	No.....	No.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Jefferson.....	Yes.....	No.....	Cash.....	Children's.....	No.....	Yes.....	Yes.....	Yes.....	National.....
Knox.....	Yes.....	Yes.....	.....	No.....	No.....	Yes.....	Yes.....	No.....	National.....
Lake.....	Yes.....	No.....	.....	Children's.....	No.....	Yes.....	Yes.....	No.....	American.....

[illegible]

BULLETIN OF AWARDS

Ohio State Fair—1912

Herein are printed the State Fair winners of 1912. Every award was made upon its merits. The contest was keen.

Competent judges placed the honors. Many worthy animals and articles had to be content without Blue Ribbon honors.

Exhibitors won awards without extravagant boast and accepted defeat without complaint.

The State Fair is a great educational event. Ohio leads in the magnitude of its grounds and Exposition buildings.

Those who are rewarded with its show ring honors have an asset of such value that can nowhere else be obtained.

Ohio State Fair trophies are trade marks of excellence and superiority. A good citizen is behind every prize winner.

The Fair of 1912 surpassed its predecessors. All departments were complete. Each exhibitor took a real interest in the Fair and displayed a willingness to do all things possible to make it a good humored success.

THE OHIO STATE BOARD OF AGRICULTURE.

List of Premium Awards

Ohio State Fair—1912

FIRST DEPARTMENT—HORSES.

E. L. LYBARGER, Member in Charge.

D. L. SAMPSON..... Superintendent
M. A. JAMESON..... Clerk

JUDGES.

MILTON YOUNG. P. P. JOHNSON. R. R. GRIEVE. C. A. TOPE. J. C. VAN MEIER. J. B. LINDSEY.
FRANK D. WARD.

Received from stall rent, 1912..... \$765 00
Premiums offered, 1912..... 4,361 00
Premiums paid, 1912..... 3,211 00
Total number of entries, 1912—517.

Premiums offered on ponies, 1912..... \$620 00
Premiums paid on ponies, 1912..... 580 00
Total number of entries, 1912—176.

Paid superintendents, judges, etc., 1912..... \$735 09

Received from stall rent, 1911..... \$768 50
Premiums offered, 1911..... 4,355 00
Premiums paid, 1911..... 3,267 00
Total number of entries, 1911—527.

Premiums offered on ponies, 1911..... \$620 00
Premiums paid on ponies, 1911..... 320 00
Total numbers of entries, 1911—40.

Paid superintendent, judges, etc., 1911..... \$530 10

Received from stall rent, 1910..... \$1,023 00
Premiums offered, 1910..... 4,355 00
Premiums paid, 1910..... 3,353 00
Total number of entries, 1910—611.

Premiums offered on ponies, 1910..... \$620 00
Premiums paid on ponies, 1910..... 608 00
Total number of entries, 1910—186.

Paid superintendent, judges, etc., 1910..... \$472 00

ROADSTERS—STANDARD BRED.

Name.	Postoffice.	Awards.	Amonut.
C. G. Smith, Agt.....	Reynoldsburg, O.....	Best stallion 4 years old or over.....	\$20 00
D. A. Sprague.....	South Charleston, O.....	2d best s'allion 4 years old or over.....	12 00
Anna Beyerly.....	Sta. B, Columbus, O.....	3d best stallion 4 years old or over.....	5 00
W. A. Barber.....	Springfield, O.....	4th best stallion 4 years old or over.....	3 00
J. C. Luellan.....	Ashley, O.....	Best stallion 3 years and under 4.....	20 00
C. G. Smith, Agt.....	Reynoldsburg, O.....	2d best stallion 3 years and under 4.....	12 00
C. G. Smith, Agt.....	Reynoldsburg, O.....	Best stallion 2 years and under 3.....	15 00
W. G. McCurdy.....	Ashley, O.....	2d best stallion 2 years and under 3.....	8 00
J. W. Price.....	Plain City, O.....	Best stallion 1 year and under 2.....	15 00
W. G. McCurdy.....	Ashley, O.....	2d best stallion 1 year and under 2.....	8 00

ROADSTERS—STANDARD BRED—Concluded.

Name.	Postoffice.	Awards.	Amount.
L. S. Cunard	Fulton, O.	3d best stallion 1 year and under 2.	\$4 00
L. S. Cunard	Fulton, O.	Best stallion colt under 1 year.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best stallion colt under 1 year.	6 00
W. G. McCurdy	Ashley, O.	Best mare 4 years old or over.	20 00
D. A. Sprague	South Charleston, O.	2d best mare 4 years old or over.	12 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best mare 4 years old or over.	5 00
Seymour Smith	Pataskala, O.	4th best mare 4 years old or over.	3 00
W. A. Barber	Springfield, O.	Best mare 3 years and under 4.	15 00
L. S. Cunard	Fulton, O.	2d best mare 3 years and under 4.	8 00
W. G. McCurdy	Ashley, O.	3d best mare 3 years and under 4.	4 00
C. G. Smith, Agt.	Reynoldsburg, O.	4th best mare 3 years and under 4.	2 00
W. A. Barber	Springfield, O.	Best mare 2 years and under 3.	15 00
W. A. Barber	Springfield, O.	Best filly 1 year and under 2.	10 00
W. A. Barber	Springfield, O.	2d best filly 1 year and under 2.	6 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best filly 1 year and under 2.	4 00
D. A. Sprague	South Charleston, O.	Best filly colt under 1 year.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	Best gelding 3 years or over.	20 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best gelding 3 years or over.	12 00
Seymour Smith	Pataskala, O.	3d best gelding 3 years or over.	5 00
C. G. Smith, Agt.	Reynoldsburg, O.	Best get of sire.	20 00
W. A. Barber	Springfield, O.	Best produce of mare.	15 00
W. G. McCurdy	Ashley, O.	2d best produce of mare.	8 00
L. S. Cunard	Fulton, O.	3d best produce of mare.	4 00

ROADSTERS—NON-STANDARD.

Name.	Postoffice.	Awards.	Amount.
White Star Stock Farm.	Delaware, O.	Best stallion 4 years old or over.	\$20 00
B. F. Parsell	Reynoldsburg, O.	2d best stallion 4 years old or over.	12 00
D. A. Sprague	South Charleston, O.	3d best stallion 4 years old or over.	5 00
B. L. Robinson	Unionville Center, O.	4th best stallion 4 years old or over.	3 00
I. L. Dent	884 Miller Ave., Columbus, O.	Best stallion 3 years and under 4.	20 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best stallion 3 years and under 4.	12 00
W. G. McCurdy	Ashley, O.	3d best stallion 3 years old and under 4.	5 00
B. F. Parsell	Reynoldsburg, O.	4th best stallion 3 years and under 4.	3 00
W. S. Robinson	Mt. Sterling, O.	Best stallion 2 years and under 3.	15 00
W. G. McCurdy	Ashley, O.	2d best stallion 2 years and under 3.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best stallion 2 years and under 3.	4 00
Homer Parkinson	Reynoldsburg, O.	4th best stallion 2 years and under 3.	2 00
L. S. Cunard	Fulton, O.	Best stallion 1 year and under 2.	15 00
D. A. Sprague	South Charleston, O.	2d best stallion 1 year and under 2.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best stallion 1 year and under 2.	4 00
W. S. Robinson	Mt. Sterling, O.	Best stallion colt under 1 year.	10 00
B. F. Parsell	Reynoldsburg, O.	2d best stallion colt under 1 year.	6 00
I. L. Dent	884 Miller Ave., Columbus, O.	3d best stallion colt under 1 year.	4 00
Anna Beyerly	Columbus, O.	4th best stallion under 1 year.	2 00
Mitchell Sales Stable	Columbus, O.	Best mare 4 years old or over.	20 00
H. S. Grimes	Portsmouth, O.	2d best mare 4 years old or over.	12 00
John Brooks	New Holland, O.	3d best mare 4 years old or over.	5 00
Anna Beyerly	Columbus, O.	4th best mare 4 years old or over.	3 00
Anna Beyerly	Columbus, O.	Best mare 3 years and under 4.	15 00
W. G. McCurdy	Ashley, O.	2d best mare 3 years and under 4.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best mare 3 years and under 4.	4 00
I. L. Dent	Columbus, O.	Best mare 2 years and under 3.	15 00
J. W. Price	Plain City, O.	2d best mare 2 years old and under 3.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best mare 2 years old and under 3.	4 00
B. F. Parsell	Reynoldsburg, O.	4th best mare 2 years and under 3.	2 00
I. L. Dent	Columbus, O.	Best filly 1 year and under 2.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best filly 1 year and under 2.	6 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best filly 1 year and under 2.	4 00
W. S. Robinson	Mt. Sterling, O.	Best filly colt under 1 year.	10 00
L. S. Cunard	Fulton, O.	2d best filly colt under 1 year.	4 00
B. F. Parsell	Reynoldsburg, O.	3d best filly colt under 1 year.	2 00
B. F. Parsell	Reynoldsburg, O.	4th best colt under 1 year.	1 00
Mitchell Sales Stable	Columbus, O.	Best gelding 3 years old or over.	20 00
Anna Beyerly	Columbus, O.	2d best gelding 3 years old or over.	12 00
White Star Stock Farm	Delaware, O.	Best get of sire.	20 00
W. S. Robinson	Mt. Sterling, O.	2d best get of sire.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best get of sire.	5 00
I. L. Dent	Columbus, O.	Best produce of mare.	15 00
W. S. Robinson	Mt. Sterling, O.	2d best produce of mare.	8 00
L. S. Cunard	Fulton, O.	3d best produce of mare.	4 00
A. C. Long	Delaware, O.	Champion roadster stallion—any age.	Cup.

AMERICAN CARRIAGE HORSES.

Name.	Postoffice.	Awards.	Amount.
White Star Stock Farm.	Delaware, O.	Best stallion 4 years old or over.	\$20 00
W. L. Robinson.	Mt. Sterling, O.	2d best stallion 4 years old or over.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best stallion 4 years old or over.	5 00
W. G. McCurdy.	Ashley, O.	Best stallion 3 years and under 4.	20 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best stallion 3 years and under 4.	10 00
White Star Stock Farm.	Delaware, O.	3d best stallion 3 years and under 4.	5 00
W. L. Robinson.	Mt. Sterling, O.	Best stallion 2 years and under 3.	15 00
Mrs Geo. Malay.	1371 Sherman Ave., Col- umbus, O.	2d best stallion 2 years and under 3.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best stallion 2 years and under 3.	4 00
J. W. Price.	Plain City, O.	Best stallion 1 year and under 2.	15 00
L. S. Cunard.	Fulton, O.	2d best stallion 1 year and under 2.	8 00
W. G. McCurdy.	Ashley, O.	3d best stallion 1 year and under 2.	4 00
W. S. Robinson.	Mt. Sterling, O.	Best stallion with 3 of his get, either sex.	25 00
Frank G. Brown.	Cardington, O.	Best mare 4 years old or over.	20 00
Harold Kennedy.	Marysville, O.	2d best mare 4 years old or over.	10 00
Seymour Smith.	Pataskala, O.	3d best mare 4 years old or over.	5 00
W. G. McCurdy.	Ashley, O.	Best mare 3 years and under 4.	20 00
W. G. McCurdy.	Ashley, O.	2d best mare 3 years and under 4.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best mare 2 years and under 4.	5 00
J. W. Price.	Plain City, O.	Best mare 2 years and under 3.	15 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best mare 2 years and under 3.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best mare 2 years and under 3.	4 00
White Star Stock Farm.	Delaware, O.	Best filly 1 year and under 2.	15 00
C. G. Smith, Agt.	Reynoldsburg, O.	2d best filly 1 year and under 2.	8 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best filly 1 year and under 2.	4 00
White Star Stock Farm.	Delaware, O.	Best foal under 1 year, either sex.	10 00
W. S. Robinson.	Mt. Sterling, O.	2d best foal under 1 year, either sex.	4 00
W. S. Robinson.	Mt. Sterling, O.	3d best foal under 1 year, either sex.	2 00
C. G. Smith, Agt.	Reynoldsburg, O.	Best carriage team, geldings.	15 00
Mitchell Sales Stable.	Columbus, O.	2d best carriage team, geldings.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	Best gelding, any age.	20 00
White Star Stock Farm.	Delaware, O.	2d best gelding, any age.	10 00
C. G. Smith, Agt.	Reynoldsburg, O.	3d best gelding, any age.	5 00

FRENCH COACH.

Name.	Postoffice.	Awards.	Amount.
McLaughlin Bros.	Columbus, O.	Best stallion 4 years old or over.	\$25 00
McLaughlin Bros.	Columbus, O.	2d best stallion 4 years old or over.	10 00
McLaughlin Bros.	Columbus, O.	3d best stallion 4 years old or over.	4 00
W. G. McCurdy.	Ashley, O.	Best stallion 2 years and under 3.	18 00
W. G. McCurdy.	Ashley, O.	Best stallion 1 year and under 2.	18 00
W. G. McCurdy.	Ashley, O.	Best mare three years old and under 4.	18 00
White Star Stock Farm.	Delaware, O.	Best mare 2 years and under 3.	18 00
Elmer Roloson.	Delaware, O.	Best filly colt under 1 year.	10 00
McLaughlin Bros.	Columbus, O.	Champion stallion, any age.	Ribbon.
W. G. McCurdy.	Ashley, O.	Champion mare, any age.	Ribbon.

GERMAN COACH.

Name.	Postoffice.	Awards.	Amount.
W. Hoewischer & Son.	Sidney, O.	Best stallion 4 years old or over.	\$25 00
Geo. W. Crawford.	Newark, O.	2d best stallion 4 years old or over.	10 00
Geo. W. Crawford.	Newark, O.	3d best stallion 4 years old or over.	4 00
Elmer Roloson.	Delaware, O.	Best mare 4 years or over.	25 00
White Star Stock Farm.	Delaware, O.	Best mare 2 years and under 3.	18 00
Elmer Roloson.	Delaware, O.	Best filly under 1 year.	10 00
Geo. W. Crawford.	Newark, O.	Best produce of mare.	20 00
Elmer Roloson.	Delaware, O.	2d best produce of mare.	8 00
Wm. Hoewischer & Son.	Sidney, O.	Champion stallion, any age.	Ribbon.
Elmer Roloson.	Delaware, O.	Champion mare, any age.	Ribbon.

BELGIAN.

Name.	Postoffice.	Awards.	Amount.
B. L. Robinson	Unionville Center, O.	Best stallion 4 years or over	\$20 00
Wm. Hoewischer & Son	Sidney, O.	2d best stallion 4 years or over	15 00
Bell Bros.	Wooster, O.	3rd best stallion 4 years or over	10 00
Geo. W. Crawford	Newark, O.	4th best stallion 4 years or over	5 00
Bell Bros.	Wooster, O.	Best stallion 3 years and under 4	20 00
Geo. W. Crawford	Newark, O.	2d best stallion 3 years and under 4	15 00
Bell Bros.	Wooster, O.	3d best stallion 3 years and under 4	10 00
Bell Bros.	Wooster, O.	4th best stallion 3 years and under 4	5 00
Geo. W. Crawford	Newark, O.	Best stallion 2 years and under 3	15 00
Geo. W. Crawford	Newark, O.	2d best stallion 2 years and under 3	12 00
Bell Bros.	Wooster, O.	3d best stallion 2 years and under 3	9 00
Bell Bros.	Wooster, O.	4th best stallion 2 years and under 3	4 00
Bell Bros.	Wooster, O.	Best stallion 1 year and under 2	15 00
Murray & Wilson	London, O.	2d best stallion 1 year and under 2	12 00
Wm. Hoewischer & Son	Sidney, O.	Best stallion colt under 1 year	10 00
Murray & Wilson	London, O.	2d best stallion colt under 1 year	8 00
Wm. Hoewischer & Son	Sidney, O.	Best mare 4 years or over	20 00
Wm. Hoewischer & Son	Sidney, O.	2d best mare 4 years or over	15 00
Murray & Wilson	London, O.	3d best mare 4 years or over	10 00
Geo. W. Crawford	Newark, O.	4th best mare 4 years or over	5 00
Bell Bros.	Wooster, O.	Best mare 3 years and under 4	15 00
Bell Bros.	Wooster, O.	Best mare 2 years and under 3	15 00
Bell Bros.	Wooster, O.	2d best mare 2 years and under 3	12 00
Wm. Hoewischer & Son	Sidney, O.	Best filly colt under 1 year	10 00
Wm. Hoewischer & Son	Sidney, O.	2d best filly colt under 1 year	8 00
Geo. W. Crawford	Newark, O.	3d best filly colt under 1 year	5 00
Wm. Hoewischer & Son	Sidney, O.	4th best filly colt under 1 year	3 00
Bell Bros.	Wooster, O.	Best get of sire	30 00
Wm. Hoewischer & Son	Sidney, O.	2d best get of sire	20 00
Murray & Wilson	London, O.	3d best get of sire	15 00
Bell Bros.	Wooster, O.	Best produce of mare	30 00
Murray & Wilson	London, O.	2d best produce of mare	20 00
Bell Bros.	Wooster, O.	Champion stallion, any age	Ribbon.
Bell Bros.	Wooster, O.	Champion mare, any age	Ribbon.

PERCHERONS.

Name.	Postoffice.	Awards.	Amount.
Lonzo McLain	Lima, O.	Best stallion 4 years or over	\$20 00
B. L. Robinson	Unionville Center, O.	2d best stallion 4 years or over	15 00
McLaughlin Bros.	Columbus, O.	3d best stallion 4 years or over	10 00
Geo. W. Crawford	Newark, O.	4th best stallion 4 years or over	5 00
Bell Bros.	Wooster, O.	Best stallion 3 years and under 4	20 00
McLaughlin Bros.	Columbus, O.	2d best stallion 3 years and under 4	15 00
McLaughlin Bros.	Columbus, O.	3d best stallion 3 years and under 4	10 00
Bell Bros.	Wooster, O.	4th best stallion 3 years and under 4	5 00
Bell Bros.	Wooster, O.	Best stallion 2 years and under 3	15 00
McLaughlin Bros.	Columbus, O.	2d best stallion 2 years and under 3	12 00
McLaughlin Bros.	Columbus, O.	3d best stallion 2 years and under 3	9 00
McLaughlin Bros.	Columbus, O.	4th best stallion 2 years and under 3	4 00
Lyons & Ferguson	Delaware, O.	Best stallion 1 year and under 2	15 00
O. C. Chambers	Galena, O.	2d best stallion 1 year and under 2	12 00
G. C. Long	Cardington, O.	3d best stallion 1 year and under 2	9 00
O. H. Pollock	Delaware, O.	4th best stallion 1 years and under 2	4 00
Lyons & Ferguson	Delaware, O.	Best stallion colt under 1 year	10 00
B. L. Robinson	Unionville Center, O.	2d best stallion colt under 1 year	8 00
B. L. Robinson	Unionville Center, O.	3d best stallion colt under 1 year	5 00
W. W. Ferguson	Delaware, O.	4th best stallion colt under 1 year	3 00
Bell Bros.	Wooster, O.	Best mare 4 years or over	20 00
Geo. W. Crawford	Newark, O.	2d best mare 4 years or over	15 00
B. L. Robinson	Unionville Center, O.	3d best mare 4 years or over	10 00
B. L. Robinson	Unionville Center, O.	4th best mare 4 years or over	5 00
Bell Bros.	Wooster, O.	Best mare 3 years and under 4	15 00
McLaughlin Bros.	Columbus, O.	2d best mare 3 years and under 4	12 00
McLaughlin Bros.	Columbus, O.	3d best mare 3 years and under 4	9 00
Wm. Hoewischer & Son	Sidney, O.	4th best mare 3 years and under 4	4 00
W. W. Ferguson	Delaware, O.	Best mare 2 years and under 3	15 00
Bell Bros.	Wooster, O.	2d best mare 2 years and under 3	12 00
Bell Bros.	Wooster, O.	3d best mare 2 years and under 3	9 00
W. W. Ferguson	Delaware, O.	4th best mare 2 years and under 3	4 00
C. F. Camp	Hamersville, O.	Best filly 1 year and under 2	10 00
Wm. Priest & Son	Polk, O.	2d best filly 1 year and under 2	8 00
W. E. Garlinghouse & Son	Galena, O.	3d best filly 1 year and under 2	5 00
Daniel Schultz	Leonardsburg, Ohio	4th best filly 1 year and under 2	3 00
B. L. Robinson	Unionville Center, O.	Best filly colt under 1 year	10 00
B. L. Robinson	Unionville Center, O.	2d best filly colt under 1 year	8 00

PERCHERONS—Concluded.

Name.	Postoffice.	Awards.	Amount.
McLaughlin Bros.	Columbus, O.	Best get of sire.....	\$30 00
B. L. Robinson.....	Unionville Center, O.....	2d best get of sire.....	20 00
Bell Bros.	Wooster, O.	Best produce of mare.....	30 00
McLaughlin Bros.	Columbus, O.	2d best produce of mare.....	20 00
McLaughlin Bros.	Columbus, O.	3d best produce of mare.....	15 00
B. L. Robinson.....	Unionville Center, O.....	4th best produce of mare.....	10 00
Lonzo McLain.....	Lima, O.	Champion stallion, any age.....	Ribbon.
Bell Bros.	Wooster, O.	Champion mare, any age.....	Ribbon.

CLYDESDALES AND SHIRES.

Name.	Postoffice.	Awards.	Amount.
David M. Galloway.....	Culpepper, Va.	Best stallion 4 years or over.....	\$25 00
David M. Galloway.....	Culpepper, Va.	Best stallion 3 years and under 4.....	25 00

AMERICAN BRED DRAFT.

Name.	Postoffice.	Awards.	Amount.
C. C. Coyner.....	Delaware, O.	Best stallion 3 years and under 4.....	\$25 00
Lyons & Ferguson.....	Delaware, O.	2d best stallion 3 years and under 4.....	10 00
Murray & Wilson.....	London, O.	3d best stallion 3 years and under 4.....	5 00
Lyons & Ferguson.....	Delaware, O.	Best stallion 2 years and under 3.....	18 00
C. M. Jones.....	Plain City, O.	2d best stallion 2 years and under 3.....	6 00
M. H. Warner.....	Quaker City, O.	3d best stallion 2 years and under 3.....	3 00
C. D. F. Dix.....	Delaware, O.	Best stallion 1 year and under 2.....	18 00
C. M. Jones.....	Plain City, O.	2d best stallion 1 year and under 2.....	6 00
C. M. Jones.....	Plain City, O.	3d best stallion 1 year and under 2.....	3 00
C. W. Humes.....	Delaware, O.	Best mare 4 years or over.....	25 00
C. M. Jones.....	Plain City, O.	2d best mare 4 years or over.....	10 00
C. C. Coyner.....	Delaware, O.	3d best mare 4 years or over.....	5 00
Lyons & Ferguson.....	Delaware, O.	Best mare 3 years and under 4.....	18 00
White Star Stock Farm.....	Delaware, O.	2d best mare 3 years and under 4.....	6 00
C. W. Humes.....	Delaware, O.	Best mare 2 years and under 3.....	18 00
Wm. Stanton.....	Ashley, O.	2d best mare 2 years and under 3.....	6 00
Lyons & Ferguson.....	Delaware, O.	3d best mare 2 years and under 3.....	3 00
W. E. Garlinghouse & Son.....	Galena, O.	Best filly 1 year and under 2.....	12 00
White Star Stock Farm.....	Delaware, O.	2d best filly 1 year and under 2.....	5 00
W. W. Ferguson.....	Delaware, O.	3d best filly 1 year and under 2.....	3 00
Lyons & Ferguson.....	Delaware, O.	Best filly colt under 1 year.....	10 00
W. W. Ferguson.....	Delaware, O.	Best get of sire.....	25 00
Lyons & Ferguson.....	Delaware, O.	2d best get of sire.....	10 00
C. M. Jones.....	Plain City, O.	3d best get of sire.....	5 00
White Star Stock Farm.....	Delaware, O.	Best produce of mare.....	20 00
Lyons & Ferguson.....	Delaware, O.	2d best produce of mare.....	8 00
C. M. Jones.....	Plain City, O.	3d best produce of mare.....	4 00
Lyons & Ferguson.....	Delaware, O.	Champion stallion, any age.....	Ribbon.
W. E. Garlinghouse & Son.....	Galena, O.	Champion mare, any age.....	Ribbon.

GRADE DRAFT.

Name.	Postoffice.	Awards.	Amount.
Elmer Roloson.....	Delaware, O.	Best gelding or mare 4 years or over.....	\$12 00
White Star Stock Farm.....	Delaware, O.	2d best gelding or mare 4 years or over.....	6 00
Wm. Stanton.....	Ashley, O.	Best gelding or mare 3 years and under 4.....	12 00
Elmer Roloson.....	Delaware, O.	2d best gelding or mare 3 years and under 4.....	6 00
Wm. Stanton.....	Ashley, O.	Best gelding or mare, any age.....	15 00
Elmer Roloson.....	Delaware, O.	2d best gelding or mare, any age.....	10 00
White Star Stock Farm.....	Delaware, O.	3d best gelding or mare, any age.....	5 00
Elmer Roloson.....	Delaware, O.	Best matched team in harness to appropriate vehicle.....	20 00
White Star Stock Farm.....	Delaware, O.	2d best matched team in harness to appropriate vehicle.....	10 00

HACKNEYS.

Name.	Postoffice.	Awards.	Amount.
A. G. Lupton.....	Hartford City, Ind.	Best mare 4 years or over.	\$25 00
A. G. Lupton.....	Hartford City, Ind.	2d best mare 4 years or over.....	10 00
W. G. McCurdy.....	Ashley, O.	Best mare 3 years and under 4.....	18 00

SADDLE HORSES.

Name.	Postoffice.	Awards.	Amount.
W. S. Robinson.....	Mt. Sterling, O.....	Best stallion 4 years or over.....	\$20 00
J. W. Price.....	Plain City, O.	2d best stallion 4 years or over.....	10 00
H. E. Donovan.....	Columbus, O.....	3d best stallion 4 years or over.....	5 00
White Star Stock Farm.....	Delaware, O.....	Best stallion under 4 years.....	15 00
Harold Kennedy.....	Marysville, O.....	Best mare 4 years or over.	20 00
Mitchell Sales Stables.	Columbus, O.....	2d best mare 4 years or over.....	10 00
W. S. Robinson.....	Mt. Sterling, O.....	3d best mare 4 years or over.....	5 00
White Star Stock Farm.....	Delaware, O.....	Best gelding 4 years or over.....	20 00
Mitchell Sales Stables.	Columbus, O.....	2d best gelding 4 years or over.....	10 00
Frank Talmadge.....	Columbus, O.....	3d best gelding 4 years or over.....	5 00

THREE GAITED HORSES.

Name.	Postoffice.	Awards.	Amount.
W. M. Ritter.....	Columbus, O.....	Best gelding, any age.....	\$20 00
White Star Stock Farm.....	Delaware, O.....	2d best gelding, any age.....	10 00
W. M. Ritter.....	Columbus, O.....	Best mare, any age.....	20 00
A. G. Lupton.....	Hartford City, Ind.....	2d best mare, any age.....	10 00
Harold Kennedy.....	Marysville, O.....	3d best mare, any age.....	5 00

COMBINED HARNESS AND SADDLE HORSES.

Name.	Postoffice.	Awards.	Amount.
W. S. Robinson.....	Mt. Sterling, O.....	Best stallion, any age.....	\$20 00
J. W. Price.....	Plain City, O.....	2d best stallion, any age.....	10 00
W. M. Ritter.....	Columbus, O.....	Best mare, any age.....	20 00
A. G. Lupton.....	Hartford City, Ind.....	2d best mare, any age.....	10 00
W. M. Ritter.....	Columbus, O.....	Best gelding, any age.....	20 00

HIGH SCHOOL HORSES.

Name.	Postoffice.	Awards.	Amonut.
H. E. Donovan.....	Columbus, O.....	Best horse, mare, or gelding ,any age.....	\$25 00

EQUESTRIANISM.

Name.	Postoffice.	Awards.	Amount.
W. M. Ritter.....	Columbus, O.....	Best lady rider with escort.....	\$15 00
W. S. Robinson.....	Mt. Sterling, O.....	2d best lady rider with escort.....	10 00
White Star Stock Farm.....	Delaware, O.....	3d best lady rider with escort.....	5 00

HARNESS CLASS.

Name.	Postoffice.	Awards.	Amount.
C. G. Smith, Agt.....	Reynoldsburg, O.....	Best pair matched roadsters to road wagon or buggy.....	\$20 30
Anna Beyerly.....	Columbus, O.....	2d best pair matched roadsters to road wagon or buggy.....	10 00
Mitchell Sales Stables.....	Columbus, O.....	3d best pair matched roadsters to road wagon or buggy.....	5 00
Anna Beyerly.....	Columbus, O.....	Best single driver to road wagon or buggy.....	10 00
Mitchell Sales Stables.....	Columbus, O.....	2d best single driver to road wagon or buggy.....	5 00
Anna Beyerly.....	Columbus, O.....	3d best single driver to road wagon or buggy.....	3 00
Mitchell Sales Stables.....	Columbus, O.....	Best coach team to coach or heavy carriage.....	20 00
Seymour Smith.....	Pataskala, O.....	2d best coach team to coach or heavy carriage.....	10 00
Mitchell Sales Stables.....	Columbus, O.....	Best single coach mare or gelding to appropriate vehicle.....	10 00
Mitchell Sales Stables.....	Columbus, O.....	2d best single coach mare or gelding to appropriate vehicle.....	5 00
W. M. Ritter.....	Columbus, O.....	Best park mare or gelding to appropriate vehicle.....	10 00
Frank G. Brown.....	Cardington, O.....	2d best park mare or gelding to appropriate vehicle.....	5 00
A. G. Lupton.....	Hartford City, Ind.....	3d best park mare or gelding to appropriate vehicle.....	3 000
Mitchell Sales Stables.....	Columbus, O.....	Best four-in-hand to coach or brake.....	20 00
W. M. Ritter.....	Columbus, O.....	Best tandem team to two-wheeled cart.....	10 00

COACHING PARADE.

Name.	Postoffice.	Awards.	Amount.
Mitchell Sales Stables.....	Columbus, O.....	Most attractive turnout.....	Sil. plate.
Anna Beyerly.....	Columbus, O.....	2d most attractive turnout.....	Sil. cup.
A. G. Lupton.....	Hartford City, Ind.....	3d most attractive turnout.....	Sil. medal

UTILITY CLASS.

Name.	Postoffice.	Awards.	Amount.
A. G. Lupton.....	Hartford City, Ind.....	Best double team and delivery or transfer wagon.....	Sil. cup.

SHETLAND PONIES.

Name.	Postoffice.	Awards.	Amount.
T. S. Simpson & Sons.....	Aurora, Ind.....	Best stallion 4 years or over.....	\$15 00
T. S. Simpson & Sons.....	Aurora, Ind.....	2d best stallion 4 years or over.....	10 00
A. G. Lupton.....	Hartford City, Ind.....	3d best stallion 4 years or over.....	5 00
A. G. Lupton.....	Hartford City, Ind.....	Best stallion 3 years and under 4.....	15 00
B. H. Slagle.....	Kenton, O.....	2d best stallion 3 years and under 4.....	10 00
Kahler & Justice.....	Plain City, O.....	Best stallion 2 years and under 3.....	12 00
T. S. Simpson & Sons.....	Aurora, Ind.....	2d best stallion 2 years and under 3.....	6 00
A. G. Lupton.....	Hartford City, Ind.....	3d best stallion 2 years and under 3.....	4 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best stallion 1 year and under 2.....	12 00
Kahler & Justice.....	Plain City, O.....	2d best stallion 1 year and under 2.....	6 00
A. G. Lupton.....	Hartford City, Ind.....	3d best stallion 1 year and under 2.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best stallion colt under 1 year.....	10 00
T. S. Simpson & Sons.....	Aurora, Ind.....	2d best stallion colt under 1 year.....	5 00
Seymour Smith.....	Pataskala, O.....	3d best stallion colt under 1 year.....	3 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best mare 4 years or over.....	15 00
Kahler & Justice.....	Plain City, O.....	2d best mare 4 years or over.....	10 00
T. S. Simpson & Sons.....	Aurora, Ind.....	3d best mare 4 years or over.....	5 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best mare 3 years and under 4.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best mare 3 years and under 4.....	10 00
T. S. Simpson & Sons.....	Aurora, Ind.....	3d best mare 3 years and under 4.....	5 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best mare 2 years and under 3.....	12 00
A. G. Lupton.....	Hartford City, Ind.....	2d best mare 2 years and under 3.....	6 00
Kahler & Justice.....	Plain City, O.....	3d best mare 2 years and under 3.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best filly 1 year and under 2.....	12 00

SHETLAND PONIES—Concluded.

Name.	Postoffice.	Awards.	Amount.
T. S. Simpson & Sons.....	Aurora, Ind.....	2d best filly 1 year and under 2.....	\$6 00
Kahler & Justice.....	Plain City, O.....	3d best filly 1 year and under 2.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best filly colt under 1 year.....	10 00
Kahler & Justice.....	Plain City, O.....	2d best filly colt under 1 year.....	5 00
A. G. Lupton.....	Hartford City, Ind.....	3d best filly colt under 1 year.....	3 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best herd of ten head.....	15 00
Kahler & Justice.....	Plain City, O.....	2d best herd of ten head.....	10 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best sire and get.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best sire and get.....	5 00
Kahler & Justice.....	Plain City, O.....	3d best sire and get.....	3 00
T. S. Simpson & Sons.....	Aurora, Ind.....	Best mare and produce.....	15 00
Kahler & Justice.....	Plain City, O.....	2d best mare and produce.....	5 00

IN HARNESS TO APPROPRIATE VEHICLES.

Name.	Postoffice.	Awards.	Amount.
A. G. Lupton.....	Hartford City, Ind.....	Best single turnout.....	\$15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best single turnout.....	8 00
A. G. Lupton.....	Hartford City, Ind.....	3d best single turnout.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best double team turnout.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best double team turnout.....	8 00
A. G. Lupton.....	Hartford City, Ind.....	3d best double team turnout.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best four in hand or abreast.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best four in hand or abreast.....	8 00
B. H. Slagle.....	Kenton, O.....	3d best four in-hand or abreast.....	4 00
A. G. Lupton.....	Hartford City, Ind.....	Best pony under saddle.....	10 00
A. G. Lupton.....	Hartford City, Ind.....	2d best pony under saddle.....	5 00
T. S. Simpson & Sons.....	Aurora, Ind.....	3d best pony under saddle.....	2 00
A. G. Lupton.....	Hartford City, Ind.....	Best tandem or three abreast.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best tandem or three abreast.....	8 00
A. G. Lupton.....	Hartford City, Ind.....	3d best tandem or three abreast.....	4 00

PONIES—OTHER THAN SHETLAND.

Name.	Postoffice.	Awards.	Amount.
A. G. Lupton.....	Hartford City, Ind.....	Best stallion 3 years or over.....	\$20 00
C. C. Hunter.....	Mt. Vernon, O.....	2d best stallion 3 years or over.....	10 00
Kahler & Justice.....	Plain City, O.....	3d best stallion 3 years or over.....	Ribbon.
A. G. Lupton.....	Hartford City, Ind.....	Best mare 3 years or over.....	20 00
T. S. Simpson & Sons.....	Aurora, Ind.....	2d best mare 3 years or over.....	10 00
Kahler & Justice.....	Plain City, O.....	3d best mare 3 years or over.....	Ribbon.
Smith Bros.....	Mt. Vernon, O.....	Best mare 2 years and under 3.....	12 00
A. G. Lupton.....	Hartford City, Ind.....	Best single turnout.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	2d best single turnout.....	8 00
A. G. Lupton.....	Hartford City, Ind.....	3d best single turnout.....	Ribbon.
A. G. Lupton.....	Hartford City, Ind.....	Best double team turnout.....	15 00
C. C. Hunter.....	Mt. Vernon, O.....	2d best double team turnout.....	8 00
Smith Bros.....	Mt. Vernon, O.....	3d best double team turnout.....	Ribbon.
A. G. Lupton.....	Hartford City, Ind.....	Best four-in-hand or abreast.....	15 00
A. G. Lupton.....	Hartford City, Ind.....	Best pony under saddle.....	10 00
A. G. Lupton.....	Hartford City, Ind.....	2d best pony under saddle.....	5 00
J. R. Wolure.....	Delaware, O.....	3d best pony under saddle.....	Ribbon.

WINNERS IN SPEED DEPARTMENT.

2:15 TROTTING—PURSE \$300.

Entered by	Residence.	Name of Horse.	Heats.	Amount. Won.
E. P. O'Neil.....	Goshen, N. Y.....	Johnny Medium.....	11 1 6 1 1	\$400 00
A. A. Crooks.....	Marion, O.....	Lady Lou.....	1 2 1 2 2	200 00
E. S. Osborn.....	Liberty, Ind.....	The Jester.....	8 4 2 8 3	120 00
Chas. Buckis.....	Woodsfield, O.....	Ben Hur.....	2 8 8 11 4	80 00

Time—2:15½, 2:15½, 2:16, 2:14½, 2:16.

2:13 PACE—PURSE \$1,000.

Entered by	Residence.	Name of Horse.	Heats.	Amount . Won.
Ora J. Jump.....	Kenton, O.....	Harry W.....	2 1 10 1 1	\$500 00
A. J. McBride.....	Toronto, Can.....	Nettie Ethon.....	1 2 9 10 3	250 00
C. L. Barkman.....	Osborn, O.....	Cinnamon.....	4 5 1 8 2	150 00
E. S. Osborn.....	Liberty, Ind.....	Blue Bell.....	8 11 2 2 4	100 00

Time—2:10½, 2:11½, 2:13½, 2:10½, 2:13.

2:35 TROT—PURSE \$500.

Entered by	Residence.	Name of Horse.	Heats.	Amount. Won.
Oscar Vallery.....	Derby, O.....	Lady Phillips.....	5 1 1 1 1	\$250 00
Dick Hipple.....	Marion, O.....	Patchen Maid.....	1 2 3 4	125 00
Porter S. Haynes.....	Chillicothe, O.....	Andy H.....	6 4 2 2	75 00
Joe Gahagen.....	Toledo, O.....	Spinks McKinney.....	2 3 4 6	50 00

Time—2:18½, 2:17½, 2:20, 2:21.

2:20 PACE—PURSE \$500.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Ed Tyrell.....	Marysville, O.....	Dwight Logan.....	1 1 1	\$250 00
H. H. Stokes.....	Urbana, O.....	Leon McKinney.....	3 2 3	125 00
N. E. Vanatta.....	Newark, O.....	Martha F.....	2 3 4	75 00
Frank Hendrick.....	Jamestown, O.....	Grace Hickson.....	8 4 2	50 00

Time—2:14½, 2:17½, 2:16½.

2:10 TROT—PURSE \$1,000.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Fred Jamison.....	Washington, Pa.....	Dolly S.....	1 1 1	\$500 00
Rody Patterson.....	Columbus, O.....	Moko Dillard.....	2 3 3	250 00
Vance Nuchols.....	Cleveland, O.....	Dr. Mack.....	3 2 4	150 00
Cliff Todd.....	Montgomery, O.....	Robert K.....	4 4 2	100 00

Time—2:15, 2:14½, 2:15.

2:26 PACE—PURSE \$500.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Ross Borden.....	Mt. Victory, O.....	Mary Garden.....	1 1 1	\$250 00
Vance Nuchols.....	Cleveland, O.....	Togo Oliver.....	6 2 2	125 00
M. S. Green.....	Springfield, Ill.....	Blue Line.....	2 4 4	75 00
H. H. Stokes.....	Urbana, O.....	Ada Burns.....	3 3 3	50 00

Time—2:18½, 2:15½, 2:15.

2:18 TROT—PURSE \$800.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Mitchell Bros.....	Findlay, O.....	Dorothy M.....	1 9 5 1 1	\$400 00
J. B. Jones.....	Chicago, Ill.....	Morning Light.....	4 2 4 2 3	200 00
A. L. Walter.....	Canal Dover, O.....	Masom Mathews.....	5 5 2 6 2	120 00
Geo. Heller.....	Tiffin, O.....	George E.....	3 4 3 4 4	80 00

Time—2:20, 2:17½, 2:16½, 2:17½, 2:20.

2:15 PACE—PURSE \$1,000.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
H. H. Stokes.....	Urbana, O.....	Silver Diamond.....	1 1 2 1	\$500 00
Frank Hendrick.....	Jamestown, O.....	View Elder.....	12 5 1 2	250 00
E. S. Osborn.....	Liberty, Ind.....	Celie W.....	2 3 5 3	150 00
Plummer Haynes.....	Chillicothe, O.....	Fletcher Burns.....	7 2 6 4	100 00

Time—2:16½, 2:15½, 2:14½, 2:14½.

2:25 TROT—PURSE \$600.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Ora J. Jump.....	Kenton, O.....	Westerville Girl.....	3 1 1 1	\$300 00
Benj. F. McCann.....	Dayton, O.....	Tom Reed.....	1 5 6 2	150 00
J. S. Caldwell.....	Chillicothe, O.....	Miss Directed.....	5 2 2 5	90 00
S. S. Shelton.....	Wilmington, O.....	Denver Downs.....	2 8 5 7	60 00

Time—2:22½, 2:22½, 2:21½, 2:23.

2:10 PACE—PURSE \$800.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
E. S. Osborn.....	Liberty, Ind.....	John D.....	1 1 1	\$400 00
Eddie Haywood.....	Philadelphia, Pa.....	Prince Metson.....	2 2 6	200 00
Harry McClellan.....	Lancaster, O.....	Red Wilkes, Jr.....	3 7 2	120 00
Maxwell & Singer.....	Cardington, O.....	Lowanda.....	7 3 5	80 00

Time—2:10½, 2:09½, 2:11.

2:12 TROT—PURSE \$1,000.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Fred Jamison.....	Washington, Pa.....	Dolly S.....	1 2 6 2 1 1	\$500 00
King Hill Stock Farm.....	St. Joseph, Mo.....	Ramey Constantine.....	6 1 2 1 2 2	250 00
Rody Patterson.....	Columbus, O.....	Moko Dillard.....	3 5 1 4 3 3	150 00
W. B. Bryson.....	Xenia, O.....	Homewood.....	2 4 3 3 4 4	100 00

Time—2:17, 2:13½, 2:14, 2:15½, 2:16, 2:17½.

2:30 PACE—PURSE \$500.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
H. B. Thatcher.....	Wheeling, W. Va.....	Isaac B.....	4 2 4 4 3 1 1 1	\$250 00
Frank Calhoun.....	Columbus, O.....	Limber Jim.....	3 10 8 1 1 2 2 4	125 00
Winston Training Stables.....	Winston Salem, N. C.....	Ore Em Bee.....	1 1 5 9 4 4 4 3	75 00
Ray Craig.....	Wilmington, O.....	Teddy Stratmore.....	2 9 1 2 2 3 3 2	50 00

Time—2:16½, 2:15½, 2:15½, 2:16½, 2:20, 2:21, 2:15, 2:19.

2:18 PACE—PURSE \$1,000.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
Ed Tyre I.....	Marysville, O.....	Dwight Logan.....	1 1 1	\$500 00
D. M. Bell.....	Delaware, O.....	Addition.....	2 3 3	250 00
D. P. Hopkins, Agt.....	Detroit, Mich.....	Halley J.....	3 2 5	150 00
N. E. Vanatta.....	Newark, O.....	Van Burn.....	6 4 2	100 00

Time—2:11½, 2:13, 2:13.

2:22 TROT—PURSE \$600.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
W. A. Barber.....	Springfield, O.....	Tregantles Nell.....	1 1 1	\$300 00
Oscar Vallery.....	Derby, O.....	Lady Phillips.....	4 2 2	150 00
Eddie Haywood.....	Philadelphia, Pa.....	Bonnie L.....	5 3 3	90 00
L. M. Huff.....	New Castle, Ind.....	Special Parole.....	3 6 4	60 00

Time—2:18½, 2:13½, 2:16.

2:23 PACE—PURSE \$600.

Entered by	Residence.	Name of Horse.	Heats.	Amount Won.
H. H. Stokes.....	Urbana, O.....	Ocean Wave.....	1 1 1	\$300 00
Frank Hedrick.....	Jamestown, O.....	Grace Hickson.....	5 2 2	150 00
Chas. Roush.....	Athens, O.....	Buck Morgan.....	2 3 4	90 00
W. T. McCoy.....	Wilmington, O.....	Dan Line.....	3 4 3	60 00

Time—2:14½, 2:17½, 2:16.

SECOND DEPARTMENT—CATTLE.

J. A. BEIDLER, Member in Charge.

E. C. FOOTE.....Superintendent.
M. L. VAN METER.....Clerk.

JUDGES.

T. E. ROBSON, JOHN GARDEN, JOHN A. LEE, R. E. FREDERICK, H. W. RENKERT,
CHAS. L. HILL, TOM DEMPSEY.

Received from stall rent, 1912.....\$654 00
Premiums offered, 1912.....7,452 00
Premiums paid, 1912.....6,322 00
Total number of entries, 1912—603.

Paid superintendents, judges, etc., 1912.....\$581 75

Received from stall retn, 1911.....\$987 50
Premiums offered, 1911.....7,383 00
Premiums paid, 1911.....6,491 00
Total number of entries, 1911—846.

Paid superintendents, judges, etc., 1911.....\$653 11

Received from stall rent, 1910.....\$1,258 50
Premiums offered, 1910.....7,325 00
Premiums paid, 1910.....6,416 00
Total number of entries, 1910—922.

Paid superintendents, judges, etc., 1910.....\$561 14

SHORTHORNS.

Name.	Postoffice.	Awards.	Amount.
Carpenter & Carpenter.....	Baraboo, Wis.....	Best bull 3 years or over.....	\$20 00
N. W. Wagner.....	Fremont, O.....	2d best bull 3 years or over.....	15 00
J. H. Miller.....	Peru, Ind.....	3d best bull 3 years or over.....	10 00
Carpenter & Ross.....	Mansfield, O.....	4th best bull 3 years or over.....	5 00
Carpenter & Carpenter.....	Baraboo, Wis.....	Best bull 2 years and under 3.....	20 00
Carpenter & Ross.....	Mansfield, O.....	2d best bull 2 years and under 3.....	15 00
Carpenter & Carpenter.....	Baraboo, Wis.....	Best senior yearling bull dropped between Sept. 1, 1910 and Jan. 1, 1911.....	20 00
Carpenter & Ross.....	Mansfield, O.....	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	20 00
D. R. Hanna.....	Ravenna, O.....	2d best junior yearling bull dropped between Jan. 1, 1911 and Sept. 1, 1911.....	15 00
R. T. Johnson.....	Flushing O.....	3d best junior yearling bull dropped between Jan. 1, 1911 and Sept. 1, 1911.....	10 00
Carpenter & Ross.....	Mansfield, O.....	Best senior bull calf dropped between Sept. 1, 1911 and Jan. 1, 1912.....	20 00
W. C. Rosenburger.....	Tiffin, O.....	2d best senior bull calf dropped between Sept. 1, 1911 and Jan. 1, 1912.....	15 00
Carpenter & Ross.....	Mansfield, O.....	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
D. R. Hanna.....	Ravenna, O.....	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1911.....	5 00
D. R. Hanna.....	Ravenna, O.....	5th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	5 00
W. C. Rosenberger.....	Tiffin, O.....	Best junior bull calf dropped since Jan. 1, 1912.....	20 00
Carpenter & Ross.....	Mansfield, O.....	2d best junior bull calf dropped since Jan. 1, 1912.....	15 00
D. R. Hanna.....	Ravenna, O.....	3d best junior bull calf dropped since Jan. 1, 1912.....	10 00
Carpenter & Ross.....	Mansfield, O.....	4th best junior bull calf dropped since Jan. 1, 1912.....	5 00
W. C. Rosenberger.....	Tiffin, O.....	5th best junior bull calf dropped since Jan. 1, 1912.....	5 00
Carpenter & Carpenter.....	Baraboo, Wis.....	Best cow 3 years old or over.....	20 00
W. C. Rosenberger.....	Tiffin, O.....	2d best cow 3 years old or over.....	15 00
J. H. Miller.....	Peru, Ind.....	3d best cow 3 years old or over.....	10 00
Carpenter & Ross.....	Mansfield, O.....	4th best cow 3 years old or over.....	5 00
Carpenter & Carpenter.....	Baraboo, Wis.....	Best cow or heifer 2 years and under 3.....	20 00
Carpenter & Carpenter.....	Baraboo, Wis.....	2d best cow or heifer 2 years and under 3.....	15 00
J. H. Miller.....	Peru, Ind.....	3d best cow or heifer 2 years and under 3.....	10 00

SHORTHORNS—Concluded.

Name.	Postoffice.	Awards.	Amount.
N. W. Wagner.....	Fremont, O.....	4th best cow or heifer 2 years and under 3.....	\$5 00
D. R. Hanna.....	Ravenna, O.....	Best senior yearling heifer dropped between Sept. 1, 1910 and Jan. 1, 1911.....	20 00
Carpenter & Carpenter....	Baraboo, Wis.....	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	15 00
Carpenter & Carpenter....	Baraboo, Wis.....	3d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	10 00
N. W. Wagner.....	Fremont, O.....	4th best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	5 00
N. W. Wagner.....	Fremont, O.....	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	20 00
D. R. Hanna.....	Ravenna, O.....	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	15 00
N. W. Wagner.....	Fremont, O.....	3d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	10 00
Carpenter & Carpenter....	Baraboo, Wis.....	4th best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	5 00
D. R. Hanna.....	Ravenna, O.....	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	20 00
D. R. Hanna.....	Ravenna, O.....	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	15 00
Carpenter & Ross.....	Mansfield, O.....	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Carpenter & Ross.....	Mansfield, O.....	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	5 00
Carpenter & Carpenter....	Baraboo, Wis.....	5th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	5 00
D. R. Hanna.....	Ravenna, O.....	Best Junior heifer calf dropped since Jan. 1, 1912.....	20 00
N. W. Wagner.....	Fremont, O.....	2d best junior heifer calf dropped since Jan. 1, 1912.....	15 00
Carpenter & Ross.....	Mansfield, O.....	3d best junior heifer calf dropped since Jan. 1, 1912.....	10 00
Carpenter & Carpenter....	Baraboo, Wis.....	4th best junior heifer calf dropped since Jan. 1, 1912.....	5 00
W. C. Rosenberger.....	Tiffin, O.....	5th best junior heifer calf dropped since Jan. 1, 1912.....	5 00
Carpenter & Carpenter....	Baraboo, Wis.....	Best exhibitor's herd.....	50 00
N. W. Wagner.....	Fremont, O.....	2d best exhibitor's herd.....	30 00
J. H. Miller.....	Peru, Ind.....	3d best exhibitor's herd.....	20 00
D. R. Hanna.....	Ravenna, O.....	Best breeder's young herd.....	40 00
Carpenter & Ross.....	Mansfield, O.....	2d best breeder's young herd.....	25 00
N. W. Wagner.....	Fremont, O.....	3d best breeder's young herd.....	15 00
D. R. Hanna.....	Ravenna, O.....	Best calf herd.....	30 00
Carpenter & Ross.....	Mansfield, O.....	2d best calf herd.....	20 00
Carpenter & Carpenter....	Baraboo, Wis.....	Best get of sire.....	30 00
D. R. Hanna.....	Ravenna, O.....	2d best get of sire.....	20 00
Carpenter & Ross.....	Mansfield, O.....	3d best get of sire.....	10 00
Carpenter & Carpenter....	Baraboo, Wis.....	Best produce of cow.....	20 00
D. R. Hanna.....	Ravenna, O.....	2d best produce of cow.....	12 00
N. W. Wagner.....	Fremont, O.....	3d best produce of cow.....	8 00
Champion.			
Carpenter & Carpenter....	Baraboo, Wis.....	Senior champion bull.....	20 00
Carpenter & Ross.....	Mansfield, O.....	Junior champion bull.....	20 00
Carpenter & Carpenter....	Baraboo, Wis.....	Senior champion cow.....	20 00
D. R. Hanna.....	Ravenna, O.....	Junior champion cow.....	20 00
Grand Champion.			
Carpenter & Carpenter....	Baraboo, Wis.....	Grand champion bull.....	\$20 00
Carpenter & Carpenter....	Baraboo, Wis.....	Grand champion female.....	20 00
Cows in Milk.			
May & Otis.....	Willoughby, O.....	Best cow 3 years or over.....	\$15 00
May & Otis.....	Willoughby, O.....	2d best cow 3 years or over.....	10 00
Wilson & Morrison.....	Delaware, O.....	3d best cow 3 years or over.....	5 00
May & Otis.....	Willoughby, O.....	Best cow under 3 years.....	15 00
May & Otis.....	Willoughby, O.....	2d best cow under 3 years.....	10 00

ABERDEEN ANGUS.

Name.	Postoffice.	Awards.	Amount.
D. Bradfute & Son.....	Xenia, O.....	Best bull 3 years or over.....	\$16 00
D. Bradfute & Son.....	Xenia, O.....	Best bull 2 years and under 3.....	16 00

ABERDEEN ANGUS—Concluded.

Name.	Postoffice.	Awards.	Amount.
D. Bradfute & Son.....	Xenia, O.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1912.....	\$12 00
D. Bradfute & Son.....	Xenia, O.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Walter Ferguson.....	Xenia, O.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
D. Bradfute & Son.....	Xenia, O.	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
D. Bradfute & Son.....	Xenia, O.	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
D. Bradfute & Son.....	Xenia, O.	Best cow 3 years or over.....	16 00
D. Bradfute & Son.....	Xenia, O.	2d best cow 3 years or over.....	12 00
D. Bradfute & Son.....	Xenia, O.	3d best cow 3 years or over.....	5 00
D. Bradfute & Son.....	Xenia, O.	Best cow or heifer 2 years and under 3.....	16 00
D. Bradfute & Son.....	Xenia, O.	2d best cow or heifer 2 years and under 3.....	12 00
D. Bradfute & Son.....	Xenia, O.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1912.....	10 00
D. Bradfute & Son.....	Xenia, O.	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1912.....	6 00
Walter Ferguson.....	Xenia, O.	3d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1912.....	4 00
D. Bradfute & Son.....	Xenia, O.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1912.....	10 00
Walter Ferguson.....	Xenia, O.	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1912.....	6 00
D. Bradfute & Son.....	Xenia, O.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
D. Bradfute & Son.....	Xenia, O.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Walter Ferguson.....	Xenia, O.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
D. Bradfute & Son.....	Xenia, O.	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
D. Bradfute & Son.....	Xenia, O.	Best junior heifer calf dropped since Jan. 1, 1912.....	10 00
Walter Ferguson.....	Xenia, O.	2d best junior heifer calf dropped since Jan. 1, 1912.....	6 00
D. Bradfute & Son.....	Xenia, O.	Best exhibitor's herd.....	30 00
D. Bradfute & Son.....	Xenia, O.	2d best exhibitor's herd.....	20 00
D. Bradfute & Son.....	Xenia, O.	Best breeder's young herd.....	30 00
Walter Ferguson.....	Xenia, O.	2d best breeder's young herd.....	20 00
D. Bradfute & Son.....	Xenia, O.	Best calf herd.....	25 00
D. Bradfute & Son.....	Xenia, O.	Best get of sire.....	20 00
D. Bradfute & Son.....	Xenia, O.	2d best get of sire.....	15 00
D. Bradfute & Son.....	Xenia, O.	Best produce of cow.....	20 00
D. Bradfute & Son.....	Xenia, O.	2d best produce of cow.....	15 00
Walter Ferguson.....	Xenia, O.	3d best produce of cow.....	10 00
D. Bradfute & Son.....	Xenia, O.	Senior champion bull.....	10 00
D. Bradfute & Son.....	Xenia, O.	Junior champion bull.....	10 00
D. Bradfute & Son.....	Xenia, O.	Senior champion cow.....	10 00
D. Bradfute & Son.....	Xenia, O.	Junior champion female.....	10 00
D. Bradfute & Son.....	Xenia, O.	Grand champion bull.....	10 00
D. Bradfute & Son.....	Xenia, O.	Grand champion female.....	10 00

HEREFORDS.

Name.	Postoffice.	Awards.	Amount.
Luce & Moxley.....	Shelbyville, Ky.	Best bull 2 years and under 3.....	\$16 00
P. E. Maxwell.....	Delaware, O.	2d best bull 2 years and under 3.....	12 00
Luce & Moxley.....	Shelbyville, Ky.	Best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	12 00
Luce & Moxley.....	Shelbyville, Ky.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	12 00
Luce & Moxley.....	Shelbyville, Ky.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Luce & Moxley.....	Shelbyville, Ky.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Luce & Moxley.....	Shelbyville, Ky.	Best junior bull calf dropped since Jan. 1, 1912.....	10 00
P. E. Maxwell.....	Delaware, O.	2d best junior bull calf dropped since Jan. 1, 1912.....	6 00
Luce & Moxley.....	Shelbyville, Ky.	Best cow 3 years or over.....	16 00
Luce & Moxley.....	Shelbyville, Ky.	Best cow or heifer 2 years and under 3.....	16 00
Luce & Moxley.....	Shelbyville, Ky.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	10 00

HEREFORDS—Concluded.

Name.	Postoffice.	Awards.	Amount.
Luce & Moxley.....	Shelbyville, Ky.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.	\$10 00
P. E. Maxwell.....	Delaware, O.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	10 00
Luce & Moxley.....	Shelbyville, Ky.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	6 00
Luce & Moxley.....	Shelbyville, Ky.	Best junior heifer calf dropped since Jan. 1, 1912.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Best exhibitor's herd.	30 00
Luce & Moxley.....	Shelbyville, Ky.	Best breeder's young herd.	30 00
Luce & Moxley.....	Shelbyville, Ky.	Best calf herd.	25 00
Luce & Moxley.....	Shelbyville, Ky.	Best get of sire.	20 00
Luce & Moxley.....	Shelbyville, Ky.	2d best get of sire.	15 00
Luce & Moxley.....	Shelbyville, Ky.	Best produce of cow.	20 00
Luce & Moxley.....	Shelbyville, Ky.	2d best produce of cow.	15 00
P. E. Maxwell.....	Delaware, O.	3d best produce of cow.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Senior champion bull.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Junior champion bull.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Senior champion cow.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Junior champion female.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Grand champion bull.	10 00
Luce & Moxley.....	Shelbyville, Ky.	Grand champion female.	10 00

POLLED DURHAMS.

Name.	Postoffice.	Awards.	Amount.
J. H. Miller.....	Peru, Ind.	Best bull 3 years or over.	\$15 00
W. W. Rose & Son.....	Rossville, Ind.	2d best bull 3 years or over.	6 00
Wm. Tossey & Sons.....	Marysville, O.	3d best bull 3 years or over.	3 00
J. H. Miller.....	Peru, Ind.	Best bull 2 years and under 3.	15 00
Wm. Tossey & Sons.....	Marysville, O.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.	10 00
J. H. Miller.....	Peru, Ind.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	8 00
Wm. Tossey & Sons.....	Marysville, O.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	4 00
W. W. Rose & Son.....	Rossville, Ind.	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	3 00
W. W. Rose & Son.....	Rossville, Ind.	Best junior bull calf dropped since Jan. 1, 1912.	8 00
J. H. Miller.....	Peru, Ind.	2d best junior bull calf dropped since Jan. 1, 1912.	4 00
Wm. Tossey & Son.....	Marysville, O.	3d best junior bull calf dropped since Jan. 1, 1912.	3 00
J. H. Miller.....	Peru, Ind.	Best cow 3 years or over.	15 00
J. H. Miller.....	Peru, Ind.	2d best cow 3 years or over.	6 00
Wm. Tossey & Son.....	Marysville, O.	3d best cow 3 years or over.	3 00
W. W. Rose & Son.....	Rossville, Ind.	4th best cow 3 years or over.	2 00
W. W. Rose & Son.....	Rossville, Ind.	Best cow or heifer 2 years and under 3.	15 00
J. H. Miller.....	Peru, Ind.	2d best cow or heifer 2 years and under 3.	6 00
J. H. Miller.....	Peru, Ind.	3d best cow or heifer 2 years and under 3.	3 00
Wm. Tossey & Sons.....	Marysville, O.	4th best cow or heifer 2 years and under 3.	2 00
W. W. Rose & Son.....	Rossville, Ind.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.	8 00
Wm. Tossey & Sons.....	Marysville, O.	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.	4 00
J. H. Miller.....	Peru, Ind.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.	8 00
J. H. Miller.....	Peru, Ind.	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.	\$4 00
W. W. Rose & Son.....	Rossville, Ind.	3d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.	3 00
Wm. Tossey & Sons.....	Marysville, O.	4th best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.	2 00
J. H. Miller.....	Peru, Ind.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	8 00
J. H. Miller.....	Peru, Ind.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	4 00
W. W. Rose & Son.....	Rossville, Ind.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	3 00
W. W. Rose & Son.....	Rossville, Ind.	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	2 00
Wm. Tossey & Sons.....	Marysville, O.	5th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.	1 00
W. W. Rose & Son.....	Rossville, Ind.	Best junior heifer calf dropped since Jan. 1, 1912.	8 00

POLLED DURHAMS—Concluded.

Name.	Postoffice.	Awards.	Amount.
W. W. Rose & Son.....	Rossville, Ind.....	2d best junior heifer calf dropped since Jan. 1, 1912.....	\$4 00
Wm. Tossey & Sons.....	Marysville, O.....	3d best junior heifer calf dropped since Jan. 1, 1912.....	3 00
Wm. Tossey & Sons.....	Marysville, O.....	4th best junior heifer calf dropped since Jan. 1, 1912.....	2 00
J. H. Miller.....	Peru, Ind.....	Best exhibitor's herd.....	25 00
J. H. Miller.....	Peru, Ind.....	2d best exhibitor's herd.....	20 00
W. W. Rose & Son.....	Rossville, Ind.....	3d best exhibitor's herd.....	10 00
J. H. Miller.....	Peru, Ind.....	Best breeder's young herd.....	25 00
Wm. Tossey & Sons.....	Marysville, O.....	2d best breeder's young herd.....	20 00
W. W. Rose & Son.....	Rossville, Ind.....	Best calf herd.....	20 00
Wm. Tossey & Sons.....	Marysville O.....	2d best calf herd.....	15 00
J. H. Miller.....	Peru, Ind.....	Best get of sire.....	15 00
W. W. Rose & Son.....	Rossville, Ind.....	2d best get of sire.....	8 00
Wm. Tossey & Sons.....	Marysville, O.....	3d best get of sire.....	5 00
J. H. Miller.....	Peru, Ind.....	Best produce of cow.....	15 00
W. W. Rose & Son.....	Rossville, Ind.....	2d best produce of cow.....	8 00
Wm. Tossey & Sons.....	Marysville, O.....	3d best produce of cow.....	5 00
J. H. Miller.....	Peru, Ind.....	Senior champion bull.....	15 00
J. H. Miller.....	Peru, Ind.....	Junior champion bull.....	15 00
J. H. Miller.....	Peru, Ind.....	Senior champion cow.....	15 00
W. W. Rose & Son.....	Rossville, Ind.....	Junior champion female.....	15 00
J. H. Miller.....	Peru, Ind.....	Grand champion bull.....	15 00
J. H. Miller.....	Peru, Ind.....	Grand champion female.....	15 00

GALLOWAYS.

Name.	Postoffice.	Awards.	Amount.
Jas. Frantz & Sons.....	Bluffton, O.....	Best bull 3 years or over.....	\$12 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best junior bull calf dropped since Jan. 1, 1912.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best cow 3 years or over.....	12 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best cow 3 years or over.....	6 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best cow or heifer 2 years and under 3.....	12 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best cow or heifer 2 years and under 3.....	6 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best senior young heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best junior heifer calf dropped since Jan. 1, 1912.....	8 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best junior heifer calf dropped since Jan. 1, 1912.....	4 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best exhibitor's herd.....	20 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best breeder's young herd.....	20 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best calf herd.....	15 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best get of sire.....	12 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best get of sire.....	6 00
Jas. Frantz & Sons.....	Bluffton, O.....	Best produce of cow.....	12 00
Jas. Frantz & Sons.....	Bluffton, O.....	2d best produce of cow.....	6 00
Jas. Frantz & Sons.....	Bluffton, O.....	3d best produce of cow.....	4 00
Jas. Frantz & Sons.....	Bluffton, O.....	Senior champion bull.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Junior champion bull.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Senior champion cow.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Junior champion female.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Grand champion bull.....	10 00
Jas. Frantz & Sons.....	Bluffton, O.....	Grand champion female.....	10 00

JERSEYS.

Name.	Postoffice.	Awards.	Amount.
The Hartman Stock Farm	Columbus, O.	Best bull 3 years or over.....	\$16 00
W. S. Souders	Rogers, O.	Best bull 2 years and under 3.....	16 00
W. S. Dixon	Brandon, Wis.	2d best bull 2 years and under 3.....	12 00
The Hartman Stock Farm	Columbus, O.	3d best bull 2 years and under 3.....	5 00
W. S. Dixon	Brandon, Wis.	Best junior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	12 00
H. S. Kelley	Mt. Gilead, O.	2d best junior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	6 00
W. S. Dixon	Brandon, Wis.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	12 00
Sheffield Farm	Glendale, O.	2d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00
Frank Lane	Columbus, O.	3d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	4 00
W. S. Dixon	Brandon, Wis.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
The Hartman Stock Farm	Columbus, O.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Sheffield Farm	Glendale, O.	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
The Hartman Stock Farm	Columbus, O.	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
H. S. Kelley	Mt. Gilead, O.	5th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	1 00
W. S. Dixon	Brandon, Wis.	Best junior bull calf dropped since Jan. 1, 1912.....	10 00
The Hartman Stock Farm	Columbus, O.	2d best junior bull calf dropped since Jan. 1, 1912.....	6 00
The Hartman Stock Farm	Columbus, O.	3d best junior bull calf dropped since Jan. 1, 1912.....	4 00
The Hartman Stock Farm	Columbus, O.	Best cow 3 years or over.....	16 00
The Hartman Stock Farm	Columbus, O.	2d best cow 3 years or over.....	12 00
Sheffield Farm	Glendale, O.	3d best cow 3 years or over.....	5 00
Sheffield Farm	Glendale, O.	4th best cow 3 years or over.....	3 00
W. S. Dixon	Brandon, Wis.	Best cow or heifer 2 years and under 3.....	16 00
W. S. Dixon	Brandon, Wis.	2d best cow or heifer 2 years and under 3.....	12 00
H. S. Kelley	Mt. Gilead, O.	3d best cow or heifer 2 years and under 3.....	5 00
The Hartman Stock Farm	Columbus, O.	4th best cow or heifer 2 years and under 3.....	3 00
W. S. Dixon	Brandon, Wis.	Best senior yearling heifer dropped between Sept. 1, 1911, and Jan. 1, 1911.....	10 00
The Hartman Stock Farm	Columbus, O.	2d best senior yearling heifer dropped be- tween Sept. 1, 1910, and Jan. 1, 1911.....	6 00
Frank Lane	Columbus, O.	3d best senior yearling heifer dropped be- tween Sept. 1, 1910, and Jan. 1, 1911.....	4 00
H. S. Kelley	Mt. Gilead, O.	4th best senior yearling heifer dropped be- tween Sept. 1, 1910, and Jan. 1, 1911.....	2 00
Sheffield Farm	Glendale, O.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	10 00
W. S. Dixon	Brandon, Wis.	2d best junior yearling heifer dropped be- tween Jan. 1, 1911, and Sept. 1, 1911.....	6 00
Sheffield Farm	Glendale, O.	3d best junior yearling heifer dropped be- tween Jan. 1, 1911, and Sept. 1, 1911.....	4 00
W. S. Dixon	Brandon, Wis.	4th best junior yearling heifer dropped be- tween Jan. 1, 1911, and Sept. 1, 1911.....	2 00
W. S. Dixon	Brandon, Wis.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
The Hartman Stock Farm	Columbus, O.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Sheffield Farm	Glendale, O.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
Sheffield Farm	Glendale, O.	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
Sheffield Farm	Glendale, O.	5th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	1 00
Sheffield Farm	Glendale, O.	Best junior heifer calf dropped since Jan. 1, 1912.....	10 00
The Hartman Stock Farm	Columbus, O.	2d best junior heifer calf dropped since Jan. 1, 1912.....	6 00
W. S. Dixon	Brandon, Wis.	3d best junior heifer calf dropped since Jan. 1, 1912.....	4 00
The Hartman Stock Farm	Columbus, O.	4th best junior heifer calf dropped since Jan. 1, 1912.....	2 00
W. S. Dixon	Brandon, Wis.	Best exhibitor's herd.....	30 00
The Hartman Stock Farm	Columbus, O.	2d best exhibitor's herd.....	20 00
Sheffield Farm	Glendale, O.	3d best exhibitor's herd.....	10 00
Sheffield Farm	Glendale, O.	Best breeder's young herd.....	30 00
W. S. Dixon	Brandon, Wis.	2d best breeder's young herd.....	20 00
The Hartman Stock Farm	Columbus, O.	3d best breeder's young herd.....	10 00
W. S. Dixon	Brandon, Wis.	Best calf herd.....	25 00
Sheffield Farm	Glendale, O.	2d best calf herd.....	20 00
The Hartman Stock Farm	Columbus, O.	3d best calf herd.....	10 00

JERSEYS.—Concluded.

Name.	Postoffice.	Awards.	Amount.
The Hartman Stock Farm	Columbus, O.	Best get of sire.....	\$20 00
Sheffield.....	Glendale, O.	2d best get of sire.....	15 00
W. S. Dixon.....	Brandon, Wis.	3d best get of sire.....	10 00
W. S. Dixon.....	Brandon, Wis.	Best produce of cow.....	20 00
The Hartman Stock Farm	Columbus, O.	2d best produce of cow.....	15 00
Sheffield Farm.....	Glendale, O.	3d best produce of cow.....	10 00
W. S. Souders.....	Rogers, O.	Senior champion bull.....	10 00
W. S. Dixon.....	Brandon, Wis.	Junior champion bull.....	10 00
The Hartman Stock Farm	Columbus, O.	Senior champion cow.....	10 00
Sheffield Farm.....	Glendale, O.	Junior champion female.....	10 00
W. S. Souders.....	Rogers, O.	Grand champion bull.....	10 00
The Hartman Stock Farm	Columbus, O.	Grand champion female.....	10 00

HOLSTEINS.

Name.	Postoffice.	Awards.	Amount.
Derrerr Bros.....	Camp Chase, O.	Best bull 3 years or over.....	\$16 00
J. G. Paxton & Son.....	Houston, Pa.	2d best bull 3 years or over.....	12 00
Sam Warren.....	New Berlin, O.	3d best bull 3 years or over.....	5 00
J. G. Paxton & Son.....	Houston, Pa.	Best bull 2 years and under 3.....	16 00
Milton M. Behner.....	Marion, O., R. D.	2d best bull 2 years and under 3.....	12 00
Derrerr Bros.....	Camp Chase, O.	Best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	12 00
J. G. Paxton & Son.....	Houston, Pa.	2d best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	6 00
Sam Warren.....	New Berlin, O.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	12 00
J. G. Paxton & Son.....	Houston, Pa.	2d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00
W. S. Dixon.....	Brandon, Wis.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Sam Warren.....	New Berlin, O.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Derrerr Bros.....	Camp Chase, O.	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
Derrerr Bros.....	Camp Chase, O.	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
Derrerr Bros.....	Camp Chase, O.	5th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	1 00
Sam Warren.....	New Berlin, O.	Best junior bull calf dropped since Jan. 1, 1912.....	10 00
Derrerr Bros.....	Camp Chase, O.	2d best junior bull calf dropped since Jan. 1, 1912.....	6 00
Derrerr Bros.....	Camp Chase, O.	3d best junior bull calf dropped since Jan. 1, 1912.....	4 00
J. G. Paxton & Son.....	Houston, Pa.	4th best junior bull calf dropped since Jan. 1, 1912.....	2 00
Sam Warren.....	New Berlin, O.	5th best junior bull calf dropped since Jan. 1, 1912.....	1 00
W. S. Dixon.....	Brandon, Wis.	Best cow 3 years or over.....	16 00
Derrerr Bros.....	Camp Chase, O.	2d best cow 3 years or over.....	12 00
J. G. Paxton & Son.....	Houston, Pa.	3d best cow 3 years or over.....	5 00
Sam Warren.....	New Berlin, O.	4th best cow 3 years or over.....	3 00
J. G. Paxton & Son.....	Houston, Pa.	Best cow or heifer 2 years and under 3.....	16 00
Derrerr Bros.....	Camp Chase, O.	2d best cow or heifer 2 years and under 3.....	12 00
Sam Warren.....	New Berlin, O.	3d best cow or heifer 2 years and under 3.....	5 00
Derrerr Bros.....	Camp Chase, O.	4th best cow or heifer 2 years and under 3.....	3 00
Derrerr Bros.....	Camp Chase, O.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	10 00
J. G. Paxton & Son.....	Houston, Pa.	2d best senior yearling heifer dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Sam Warren.....	New Berlin, O.	3d best senior yearling heifer dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
Derrerr Bros.....	Camp Chase, O.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	10 00
Sam Warren.....	New Berlin, O.	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00
Sam Warren.....	New Berlin, O.	3d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	4 00
Sam Warren.....	New Berlin, O.	4th best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	2 00
J. G. Paxton & Son.....	Houston, Pa.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Derrerr Bros.....	Camp Chase, O.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00

HOLSTEINS—Concluded.

Name.	Postoffice.	Awards.	Amount.
Sam Werren	New Berlin, O.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	\$4 00
Derrerr Bros.	Camp Chase, O.	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	2 00
Sam Werren	New Berlin, O.	5th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	1 00
W. S. Dixon	Brandon, Wis.	Best junior heifer calf dropped since Jan. 1, 1912	10 00
W. S. Dixon	Brandon, Wis.	2d best junior heifer calf dropped since Jan. 1, 1912	6 00
Derrerr Bros.	Camp Chase, O.	3d best junior heifer calf dropped since Jan. 1, 1912	4 00
Derrerr Bros.	Camp Chase, O.	4th best junior heifer calf dropped since Jan. 1, 1912	2 00
Sam Werren	New Berlin, O.	5th best junior heifer calf dropped since Jan. 1, 1912	1 00
Derrerr Bros.	Camp Chase, O.	Best exhibitor's herd	30 00
J. G. Paxton & Son	Houston, Pa.	2d best exhibitor's herd	20 00
Sam Werren	New Berlin, O.	3d best exhibitor's herd	10 00
Derrerr Bros.	Camp Chase, O.	Best breeder's young herd	30 00
J. G. Paxton & Son	Houston, Pa.	2d best breeder's young herd	20 00
Sam Werren	New Berlin, O.	3d best breeder's young herd	10 00
Sam Werren	New Berlin, O.	Best calf herd	25 00
Derrerr Bros.	Camp Chase, O.	2d best calf herd	20 00
Derrerr Bros.	Camp Chase, O.	Best get of sire	20 00
J. G. Paxton & Son	Houston, Pa.	2d best get of sire	15 00
Sam Werren	New Berlin, O.	3d best get of sire	10 00
J. G. Paxton & Son	Houston, Pa.	Best produce of cow	20 00
Derrerr Bros.	Camp Chase, O.	2d best produce of cow	15 00
J. G. Paxton & Son	Houston, Pa.	3d best produce of cow	10 00
Derrerr Bros.	Camp Chase, O.	Senior champion bull	10 00
W. S. Dixon	Brandon, Wis.	Junior champion bull	10 00
W. S. Dixon	Brandon, Wis.	Senior champion cow	10 00
J. G. Paxton & Son	Houston, Pa.	Junior champion female	10 00
W. S. Dixon	Brandon, Wis.	Grand champion bull	10 00
W. S. Dixon	Brandon, Wis.	Grand champion female	10 00

RED POLLS.

Name.	Postoffice.	Awards.	Amount.
Geo. Ineichen & Sons	Geneva, Ind.	Best bull 3 years or over	\$12 00
Frank Hartline & Sons	Strasburg, O.	Best bull 2 years and under 3	12 00
Geo. Ineichen & Sons	Geneva, Ind.	Best senior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911	10 00
Geo. Ineichen & Sons	Geneva, Ind.	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911	10 00
Frank Hartline & Sons	Strasburg, O.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	8 00
Frank Hartline & Sons	Strasburg, O.	Best junior bull calf dropped since Jan. 1, 1912	8 00
Geo. Ineichen & Sons	Geneva, Ind.	2d best junior bull calf dropped since Jan. 1, 1912	4 00
Geo. Ineichen & Sons	Geneva, Ind.	Best cow 3 years or over	12 00
Frank Hartline & Sons	Strasburg, O.	2d best cow 3 years or over	6 00
Geo. Ineichen & Sons	Geneva, Ind.	3d best cow 3 years or over	3 00
Frank Hartline & Sons	Strasburg, O.	Best cow or heifer 2 years and under 3	12 00
Geo. Ineichen & Sons	Geneva, Ind.	2d best cow or heifer 2 years and under 3	6 00
Frank Hartline & Sons	Strasburg, O.	3d best cow or heifer 2 years and under 3	3 00
Frank Hartline & Sons	Strasburg, O.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	8 00
Geo. Ineichen & Sons	Geneva, Ind.	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	4 00
Frank Hartline & Sons	Strasburg, O.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	8 00
Geo. Ineichen & Sons	Geneva, Ind.	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	4 00
Frank Hartline & Sons	Strasburg, O.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	8 00
Geo. Ineichen & Sons	Geneva, Ind.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	4 00
Frank Hartline & Sons	Strasburg, O.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	3 00
Geo. Ineichen & Sons	Geneva, Ind.	Best junior heifer calf dropped since Jan. 1, 1912	8 00

RED POLLS—Concluded.

Name.	Postoffice.	Awards.	Amount.
Geo. Ineichen & Sons.....	Geneva, Ind.....	2d best junior heifer calf dropped since Jan. 1, 1912.....	\$4 00
Frank Hartline & Sons.....	Strasburg, O.....	3d best junior heifer calf dropped since Jan. 1, 1912.....	3 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Best exhibitor's herd.....	25 00
Frank Hartline & Sons.....	Strasburg, O.....	2d best exhibitor's herd.....	20 00
Frank Hartline & Sons.....	Strasburg, O.....	Best breeder's young herd.....	25 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	2d best breeder's young herd.....	20 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Best calf herd.....	20 00
Frank Hartline & Sons.....	Strasburg, O.....	Best get of sire.....	20 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	2d best get of sire.....	15 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	3d best get of sire.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Best produce of cow.....	20 00
Frank Hartline & Sons.....	Strasburg, O.....	2d best produce of cow.....	15 00
Frank Hartline & Sons.....	Strasburg, O.....	3d best produce of cow.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Senior champion bull.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Junior champion bull.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Senior champion cow.....	10 00
Frank Hartline & Sons.....	Strasburg, O.....	Junior champion female.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Grand champion bull.....	10 00
Geo. Ineichen & Sons.....	Geneva, Ind.....	Grand champion female.....	10 00

GUERNSEYS.

Name.	Postoffice.	Awards.	Amount.
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	Best bull 3 years or over.....	\$16 00
W. D. Phelps.....	Columbus, O.....	2d best bull 3 years or over.....	12 00
Elbert H. Baker.....	Gates Mill, O.....	3d best bull 3 years or over.....	5 00
Samuel Hertel.....	Van Wert, O.....	Best bull 12 years and under 3.....	16 00
W. Henry Bell & Sons.....	Scott's Sta., Ky.....	2d best bull 2 years and under 3.....	12 00
Mark E. Smith.....	Shepherd, O.....	3d best bull 2 years and under 3.....	5 00
Dean Valley Stock Farm.....	Linden Heights, O.....	Best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	12 00
R. D. Gates.....	Chardon, O.....	2d best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	6 00
Elbert H. Baker.....	Gates Mill, O.....	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	12 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00
W. D. Phelps.....	Columbus, O.....	3d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	4 00
Chestnut Hill Farm.....	Coalburg, O.....	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
Samuel Hertel.....	Van Wert, O.....	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	5th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	1 00
Elbert H. Baker.....	Gates Mill, O.....	Best junior bull calf dropped since Jan. 1, 1912.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best junior bull calf dropped since Jan. 1, 1912.....	6 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	3d best junior bull calf dropped since Jan. 1, 1912.....	4 00
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	4th best junior bull calf dropped since Jan. 1, 1912.....	2 00
R. D. Gates.....	Chardon, O.....	5th best junior bull calf dropped since Jan. 1, 1912.....	1 00
Elbert H. Baker.....	Gates Mill, O.....	Best cow 3 years old or over.....	16 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best cow 3 years old or over.....	12 00
R. D. Gates.....	Chardon, O.....	3d best cow 3 years old or over.....	5 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	4th best cow 3 years old or over.....	3 00
R. D. Gates.....	Chardon, O.....	Best cow or heifer 2 years and under 3.....	16 00
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	2d best cow or heifer 2 years and under 3.....	12 00
A. W. Smith.....	Paraskala, O.....	3d best cow or heifer 2 years and under 3.....	5 00
Elbert H. Baker.....	Gates Mill, O.....	4th best cow or heifer 2 years and under 3.....	3 00
R. D. Gates.....	Chardon, O.....	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	10 00

GUERNSEYS—Concluded.

Name.	Postoffice.	Awards.	Amount.
Elbert H. Baker.....	Gates Mill, O.....	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	\$6 00
Elbert H. Baker.....	Gates Mill, O.....	3d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	4 00
W. D. Phelps.....	Columbus, O.....	4th best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911.....	2 00
Mark E. Smith.....	Shepard, O.....	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	3d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	4 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	4th best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911.....	2 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	10 00
Elbert H. Baker.....	Gates Mill, O.....	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	6 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	4 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912.....	2 00
R. D. Gates.....	Chardon, O.....	5th best senior heifer dropped between Sept. 1, 1911, and Jan. 1, 1912.....	1 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	Best junior heifer calf dropped since Jan. 1, 1912.....	10 00
Dean Valley Stock Farm.....	Linden Heights, O.....	2d best junior heifer calf dropped since Jan. 1, 1912.....	6 00
Elbert H. Baker.....	Gates Mill, O.....	3d best junior heifer calf dropped since Jan. 1, 1912.....	4 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	4th best junior heifer calf dropped since Jan. 1, 1912.....	2 00
A. W. Smith.....	Pataskala, O.....	5th best junior heifer calf dropped since Jan. 1, 1912.....	1 00
Elbert H. Baker.....	Gates Mill, O.....	Best exhibitor's herd.....	30 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best exhibitor's herd.....	20 00
R. D. Gates.....	Chardon, O.....	3d best exhibitor's herd.....	10 00
Elbert H. Baker.....	Gates Mill, O.....	Best breeder's young herd.....	30 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	2d best breeder's young herd.....	20 00
R. D. Gates.....	Chardon, O.....	3d best breeder's young herd.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	Best calf herd.....	25 00
R. D. Gates.....	Chardon, O.....	2d best calf herd.....	20 00
W. D. Phelps.....	Columbus, O.....	3d best calf herd.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	Best get of sire.....	20 00
R. D. Gates.....	Chardon, O.....	2d best get of sire.....	15 00
Elbert H. Baker.....	Gates Mill, O.....	3d best get of sire.....	10 00
W. Henry Bell & Son.....	Scott's Sta., Ky.....	Best produce of cow.....	20 00
Elbert H. Baker.....	Gates Mill, O.....	2d best produce of cow.....	15 00
R. D. Gates.....	Chardon, O.....	3d best produce of cow.....	10 00
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	Senior champion bull.....	10 00
Chestnut Hill Farm.....	Coalburg, O.....	Junior champion bull.....	10 00
Elbert H. Baker.....	Gates Mill, O.....	Senior champion cow.....	10 00
Mark E. Smith.....	Shepard, O.....	Junior champion female.....	10 00
Wiscinda Stock & Dairy Farm.....	Acton, Ind.....	Grand champion bull.....	10 00
Elbert H. Baker.....	Gates Mill, O.....	Grand champion female.....	10 00

AYRSHIRES.

Name.	Postoffice.	Awards.	Amount.
J. F. Converse & Co.....	Woodville, N. Y.....	Best bull 3 years old or over.....	\$16 00
W. P. Schanck.....	Avon, N. Y.....	2d best bull 3 years or over.....	12 00
W. L. McCormick.....	Pataskala, O.....	3d best bull 3 years or over.....	5 00
W. P. Schanck.....	Avon, N. Y.....	Best bull 2 years and under 3.....	16 00
J. F. Converse & Co.....	Woodville, N. Y.....	2d best bull 2 years and under 3.....	12 00
J. A. Stalter.....	Pataskala, O.....	3d best bull 2 years and under 3.....	5 00
W. P. Schanck.....	Avon, N. Y.....	Best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	12 00
W. L. McCormick.....	Pataskala, O.....	2d best senior yearling bull dropped between Sept. 1, 1910, and Jan. 1, 1911.....	6 00
J. F. Converse & Co.....	Woodville, N. Y.....	Best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	12 00
J. A. Stalter.....	Pataskala, O.....	2d best junior yearling bull dropped between Jan. 1, 1911, and Sept. 1, 1911.....	6 00

AYRSHIRES—Concluded.

Name.	Postoffice.	Awards.	Amount.
J. F. Converse & Co. . . .	Woodville, N. Y.	Best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	\$10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	2d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	6 00
J. A. Stalter	Pataskala, O.	3d best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	4 00
J. A. Stalter	Pataskala, O.	4th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	2 00
W. L. McCormick	Pataskala, O.	5th best senior bull calf dropped between Sept. 1, 1911, and Jan. 1, 1912	1 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best junior bull calf dropped since Jan. 1, 1912	10 00
W. P. Schanck	Avon, N. Y.	2d best junior bull calf dropped since Jan. 1, 1912	6 00
W. L. McCormick	Pataskala, O.	3d best junior bull calf dropped since Jan. 1, 1912	4 00
W. P. Schanck	Avon, N. Y.	Best cow 3 years or over	16 00
J. F. Converse & Co. . . .	Woodville, N. Y.	2d best cow 3 years or over	12 00
W. P. Schanck	Avon, N. Y.	3d best cow 3 years or over	5 00
W. L. McCormick	Pataskala, O.	4th best cow 3 years or over	3 00
W. P. Schanck	Avon, N. Y.	Best cow or heifer 2 years and under 3	16 00
J. F. Converse & Co. . . .	Woodville, N. Y.	2d best cow or heifer 2 years and under 3	12 00
J. A. Stalter	Pataskala, O.	3d best cow or heifer 2 years and under 3	5 00
W. L. McCormick	Pataskala, O.	4th best cow or heifer 2 years and under 3	3 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	10 00
J. A. Stalter	Pataskala, O.	2d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	6 00
W. P. Schanck	Avon, N. Y.	3d best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	4 00
W. P. Schanck	Avon, N. Y.	4th best senior yearling heifer dropped between Sept. 1, 1910, and Jan. 1, 1911	2 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	10 00
W. P. Schanck	Avon, N. Y.	2d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	6 00
J. A. Stalter	Pataskala, O.	3d best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	4 00
J. A. Stalter	Pataskala, O.	4th best junior yearling heifer dropped between Jan. 1, 1911, and Sept. 1, 1911	2 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	10 00
W. L. McCormick	Pataskala, O.	2d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	6 00
W. P. Schanck	Avon, N. Y.	3d best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	4 00
W. P. Schanck	Avon, N. Y.	4th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	2 00
J. A. Stalter	Pataskala, O.	5th best senior heifer calf dropped between Sept. 1, 1911, and Jan. 1, 1912	1 00
W. L. McCormick	Pataskala, O.	Best junior heifer calf dropped since Jan. 1, 1912	10 00
W. P. Schanck	Avon, N. Y.	2d best junior heifer calf dropped since Jan. 1, 1912	6 00
J. F. Converse & Co. . . .	Woodville, N. Y.	3d best junior heifer calf dropped since Jan. 1, 1912	4 00
J. A. Stalter	Pataskala, O.	4th best junior heifer calf dropped since Jan. 1, 1912	2 00
J. A. Stalter	Pataskala, O.	5th best junior heifer calf dropped since Jan. 1, 1912	1 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best exhibitor's herd	30 00
W. P. Schanck	Avon, N. Y.	2d best exhibitor's herd	20 00
W. L. McCormick	Pataskala, O.	3d best exhibitor's herd	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best breeder's young herd	30 00
J. A. Stalter	Pataskala, O.	2d best breeder's young herd	20 00
W. P. Schanck	Avon, N. Y.	3d best breeder's young herd	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best calf herd	25 00
W. P. Schanck	Avon, N. Y.	2d best calf herd	20 00
J. A. Stalter	Pataskala, O.	3d best calf herd	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best get of sire	20 00
W. P. Schanck	Avon, N. Y.	2d best get of sire	15 00
J. A. Stalter	Pataskala, O.	3d best get of sire	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Best produce of cow	20 00
J. P. Converse & Co. . . .	Woodville, N. Y.	2d best produce of cow	15 00
J. A. Stalter	Pataskala, O.	3d best produce of cow	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Senior champion bull	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Junior champion bull	10 00
W. P. Schanck	Avon, N. Y.	Senior champion cow	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Junior champion female	10 00
J. F. Converse & Co. . . .	Woodville, N. Y.	Grand champion bull	10 00
W. P. Schanck	Avon, N. Y.	Grand champion female	10 00

DEVONS.

Name.	Postoffice.	Awards.	Amount.
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best bull 3 years or over	\$15 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best bull 1 year and under 2	10 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best bull under 1 year	8 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	2d best bull under 1 year	5 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	3d best bull under 1 year	3 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best cow 3 years or over	15 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	2d best cow 3 years or over	10 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	3d best cow 3 years or over	5 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best cow or heifer 2 years and under 3	15 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	2d best cow or heifer 2 years and under 3	10 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best heifer 1 year and under 2	10 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best heifer under 1 year	8 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best exhibitor's herd	25 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best get of sire	15 00
The Wheeler Homestead, M. S. Jones, Owner.	Kanona, N. Y., Danville, Ill.	Best produce of cow	15 00

BROWN SWISS.

Name.	Postoffice.	Awards.	Amount.
Hull Bros.	Painesville, O.	Best bull 3 years or over	\$15 00
A. F. Wampler.	Dayton, O.	Best bull 2 years and under 3	15 00
Hull Bros.	Painesville, O.	2d best bull 2 years and under 3	10 00
Hull Bros.	Painesville, O.	Best bull 1 year and under 2	10 00
Hull Bros.	Painesville, O.	2d best bull 1 year and under 2	7 00
A. F. Wampler.	Dayton, O.	3d best bull 1 year and under 2	4 00
Hull Bros.	Painesville, O.	Best bull under 1 year	8 00
Hull Bros.	Painesville, O.	2d best bull under 1 year	5 00
A. F. Wampler.	Dayton, O.	3d best bull under 1 year	3 00
Hull Bros.	Painesville, O.	Best cow 3 years or over	15 00
Hull Bros.	Painesville, O.	2d best cow 3 years or over	10 00
A. F. Wampler.	Dayton, O.	3d best cow 3 years or over	5 00
Hull Bros.	Painesville, O.	Best cow or heifer 2 years and under 3	15 00
A. F. Wampler.	Dayton, O.	2d best cow or heifer 2 years and under 3	10 00
Hull Bros.	Painesville, O.	Best heifer 1 year and under 2	10 00
A. F. Wampler.	Dayton, O.	2d best heifer 1 year and under 2	7 00
Hull Bros.	Painesville, O.	3d best heifer 1 year and under 2	4 00
Hull Bros.	Painesville, O.	Best heifer under 1 year	8 00
Hull Bros.	Painesville, O.	2d best heifer under 1 year	5 00
A. F. Wampler.	Dayton, O.	3d best heifer under 1 year	3 00
Hull Bros.	Painesville, O.	Best exhibitor's herd	25 00
Hull Bros.	Dayton, O.	2d best exhibitor's herd	15 00
A. F. Wampler.	Painesville, O.	Best breeder's young herd	25 00
A. F. Wampler.	Dayton, O.	2d best breeder's young herd	15 00
Hull Bros.	Painesville, O.	Best get of sire	15 00
A. F. Wampler.	Dayton, O.	2d best get of sire	10 00
Hull Bros.	Painesville, O.	3d best get of sire	5 00
Hull Bros.	Painesville, O.	Best produce of cow	15 00
A. F. Wampler.	Dayton, O.	2d best produce of cow	10 00

FAT CATTLE.

Name.	Postoffice.	Awards.	Amount.
Wm. Huffman.....	Washington C. H., O.	Best steer or spayed heifer 2 years and under 3.	\$30 00
Carpenter & Ross.....	Mansfield, O.	2d best steer or spayed heifer 2 years and under 3.	20 00
Wm. Huffman.....	Washington C. H., O.	3d best steer or spayed heifer 2 years and under 3.	10 00
Carpenter & Ross.....	Mansfield, O.	Best steer or spayed heifer 1 year and under 2.	30 00
Wm. Huffman.....	Washington C. H., O.	2d best steer or spayed heifer 1 year and under 2.	20 00
Wm. Huffman.....	Washington C. H., O.	3d best steer or spayed heifer 1 year and under 2.	10 00
D. Bradfute & Son.....	Xenia, O.	Best steer or spayed heifer under 1 year.....	30 00
D. Bradfute & Son.....	Xenia, O.	2d best steer or spayed heifer under 1 year ..	20 00
Carpenter & Ross.....	Mansfield, O.	3d best steer or spayed heifer under 1 year ..	10 00
Carpenter & Ross.....	Mansfield, O.	Best exhibitor's herd.....	30 00
Wm. Huffman.....	Washington C. H., O.	2d best exhibitor's herd.	20 00
Wm. Huffman.....	Washington C. H., O.	3d best exhibitor's herd.	10 00
D. Bradfute & Son.....	Xenia, O.	Champion steer or spayed heifer.....	10 00

THIRD DEPARTMENT--SWINE.

J. F. CROSS, Member in Charge.

J. MATT CLEVER

Superintendent.

CARL WILSON

Clerk.

JUDGES.

MARLEY RILEY, D. W. BROWN, C. W. HAINES, FRANK SWOPE.

Received from pen rent, 1912	\$418 50
Premiums offered, 1912	2,834 00
Premiums paid, 1912	2,773 00
Total number of entries, 1912—1,261.	
Paid superintendent, judges, etc, 1912	\$272 80
Received from pen rent, 1911	\$431 25
Premiums offered, 1911	3,459 00
Premiums paid, 1911	3,421 00
Total number of entries, 1911—1,138.	
Paid superintendent, judges, etc, 1911	\$240 04
Received from pen rent, 1910	\$479 00
Premiums offered, 1910	2,413 00
Premiums paid, 1910	2,192 00
Total number of entries, 1910—646	
Paid superintendent, judges, etc, 1910	\$199 15

BERKSHIRES.

Name.	Postoffice	Awards.	Amount.
S. T. Baker	Cedarville, O.	Best boar 2 years or over	\$15 00
W. Y. C. Humes	Huntsville, Ala.	2d best boar 2 years or over	10 00
Townsend Farms	New London, O.	3d best boar 2 years or over	5 00
W. Y. C. Humes	Huntsville, Ala.	Best boar 18 months and under 24 months	15 00
B. O. Rabeebing	St. Marys, O.	2d best boar 18 months and under 24 months	10 00
Townsend Farms	New London, O.	3d best boar 18 months and under 24 months	5 00
W. Y. C. Humes	Huntsville, Ala.	Test boar 12 months and under 18 months	10 00
Elmendorf Farms	Lexington, Ky.	2d best boar 12 months and under 18 months	7 00
Sheffield Farm	Glendale, O.	3d best boar 12 months and under 18 months	4 00
Elmendorf Farms	Lexington, Ky.	Best boar 6 months and under 1 year	10 00
B. O. Rabeebing	St. Marys, O.	2d best boar 6 months and under 1 year	7 00
Sheffield Farm	Glendale, O.	3d best boar 6 months and under 1 year	4 00
Elmendorf Farms	Lexington, Ky.	Best boar under 6 months	10 00
Elmendorf Farms	Lexington, Ky.	2d best boar under 6 months	7 00
W. Y. C. Humes	Huntsville, Ala.	3d best boar under 6 months	4 00
W. Y. C. Humes	Huntsville, Ala.	Best sow 2 years or over	15 00
Townsend Farm	New London, O.	2d best sow 2 years or over	10 00
Elmendorf Farm	Lexington, Ky.	3d best sow 2 years or over	5 00
Townsend Farm	New London, O.	Best sow 18 months and under 24 months	15 00
W. Y. C. Hume	Huntsville, Ala.	2d best sow 18 months and under 24 months	10 00
F. E. Kite	St. Paris, O.	3d best sow 18 months and under 24 months	5 00
W. Y. C. Hume	Huntsville, Ala.	Best sow 12 months and under 18 months	10 00
W. Y. C. Humes	Huntsville, Ala.	2d best sow 12 months and under 18 months	7 00
Elmendorf Farms	Lexington, Ky.	3d best sow 12 months and under 18 months	4 00
Elmendorf Farms	Lexington, Ky.	Best sow 6 months and under 12 months	10 00
Elmendorf Farms	Lexington, Ky.	2d best sow 6 months and under 12 months	7 00
Elmendorf Farms	Lexington, Ky.	3d best sow 6 months and under 12 months	4 00
Townsend Farms	New London, O.	Best sow under 6 months	10 00
W. Y. C. Humes	Huntsville, Ala.	2d best sow under 6 months	7 00
Townsend Farms	New London, O.	3d best sow under 6 months	4 00
Breeder's Rings.			
W. Y. C. Humes	Huntsville, Ala.	Best 4 swine any age the get of one boar	20 00
Elmendorf Farms	Lexington, Ky.	2d best 4 swine any age, the get of one boar	10 00
Elmendorf Farms	Lexington, Ky.	3d best 4 swine any age, the get of one boar	5 00
Townsend Farms	New London, O.	Best 4 pigs under 6 months, one litter	20 00
Elmendorf Farms	Lexington, Ky.	2d best 4 pigs under 6 months, one litter	10 00
W. Y. C. Humes	Huntsville, Ala.	3d best 4 pigs under 6 months, one litter	5 00
W. Y. C. Humes	Huntsville, Ala.	Best exhibitor's herd	20 00
Townsend Farms	New London, O.	2d best exhibitor's herd	12 00
W. Y. C. Humes	Huntsville, Ala.	3d best exhibitor's herd	7 00
Elmendorf Farms	Lexington, Ky.	Best breeder's young herd	20 00
Sheffield Farm	Glendale, O.	2d best breeder's young herd	12 00
Townsend Farms	New London, O.	3d best breeder's young herd	7 00

BERKSHIRES—Concluded.

Name.	Postoffice.	Awards.	Amount.
Champions.			
S. T. Baker	Cedarville, O.	Senior boar 1 year and over	\$10 00
Elmendorf Farms	Lexington, Ky.	Junior boar under 1 year.	10 00
W. Y. C. Humes	Huntsville, Ala.	Senior sow 1 year and over.	10 00
Elmendorf Farms	Lexington, Ky.	Junior sow under 1 year.	10 00
Grand Champions.			
S. T. Baker	Cedarville, O.	Boar any age.	10 00
W. Y. C. Humes	Huntsville, Ala.	Sow any age.	10 00

CHESTER WHITES.

Name.	Postoffice.	Awards.	Amount.
Chas. Wenger	Clayton, O.	Best boar 2 years or over	\$15 00
P. J. Wade	Weston, O.	2d best boar 2 years or over	10 00
W. G. Fawcett & Son. . .	Chesterhill, O.	3d best boar 2 years or over.	5 00
Chas. Wenger	Clayton, O.	Best boar 18 months and under 24.	15 00
Adams Bros.	Litchfield, Mich.	2d best boar 18 months and under 24.	10 00
W. G. Fawcett & Son. . .	Chesterhill, O.	Best boar 12 months and under 18.	10 00
Adams Bros.	Litchfield, Mich.	2d best boar 12 months and under 18.	7 00
Chas. Wenger	Clayton, O.	Best boar 6 months and under 1 year.	10 00
P. J. Wade	Weston, O.	2d best boar 6 months and under 1 year.	7 00
A. C. Fielder	DeGraff, O.	3d best boar 6 months and under 1 year.	4 00
Adams Bros.	Litchfield, Mich.	Best boar under 6 months.	10 00
Chas. Wenger	Clayton, O.	2d best boar under 6 months.	7 00
Adams Bros.	Litchfield, Mich.	3d best boar under 6 months.	4 00
W. G. Fawcett & Son. . .	Chesterhill, O.	Best sow 2 years or over.	15 00
Adams Bros.	Litchfield, Mich.	2d best sow 2 years or over.	10 00
Chas. Wenger	Clayton, O.	Best sow 18 months and under 24.	15 00
Chas. Wenger	Clayton, O.	2d best sow 18 months and under 24.	10 00
Chas. Wenger	Clayton, O.	Best sow 12 months and under 18.	10 00
Adams Bros.	Litchfield, Mich.	2d best sow 12 months and under 18.	7 00
W. G. Fawcett & Son. . .	Chesterhill, O.	3d best sow 12 months and under 18.	4 00
Chas. Wenger	Clayton, O.	Best sow 6 months and under 12.	10 00
Chas. Wenger	Clayton, O.	2d best sow 6 months and under 12.	7 00
Chas. Wenger	Clayton, O.	3d best sow 6 months and under 12.	4 00
Chas. Wenger	Clayton, O.	Best sow under 6 months.	10 00
Chas. Wenger	Clayton, O.	2d best sow under 6 months.	7 00
Chas. Wenger	Clayton, O.	3d best sow under 6 months.	4 00
Breeder's Rings.			
Chas. Wenger	Clayton, O.	Best 4 swine any age, the get of one boar.	20 00
Chas. Wenger	Clayton, O.	2d best 4 swine any age, the get of one boar.	10 00
Chas. Wenger	Clayton, O.	3d best 4 swine any age, the get of one boar.	5 00
Chas. Wenger	Clayton, O.	Best 4 pigs under 6 months, one litter.	20 00
Adams Bros.	Litchfield, Mich.	2d best 4 pigs under 6 months, one litter.	10 00
A. C. Fielder	DeGraff, O.	3d best 4 pigs under 6 months, one litter.	5 00
Chas. Wenger	Clayton, O.	Best exhibitor's herd.	20 00
Adams Bros.	Litchfield, Mich.	2d best exhibitor's herd.	12 00
Chas. Wenger	Clayton, O.	Best breeder's young herd.	20 00
Chas. Wenger	Clayton, O.	2d best breeder's young herd.	12 00
P. J. Wade	Weston, O.	3d best breeder's young herd.	7 00
Champions.			
Chas. Wenger	Clayton, O.	Senior boar 1 year and over	10 00
Chas. Wenger	Clayton, O.	Junior boar under 1 year.	10 00
Chas. Wenger	Clayton, O.	Senior sow 1 year and over.	10 00
Chas. Wenger	Clayton, O.	Junior sow under 1 year.	10 00
Grand Champions.			
Chas. Wenger	Clayton, O.	Boar, any age.	10 00
Chas. Wenger	Clayton, O.	Sow, any age.	10 00

POLAND CHINAS.

Name.	Postoffice.	Awards.	Amount.
A. C. Grieve & Sons	Xenia, O.	Best boar 2 years or over	\$15 00
A. C. Grieve & Sons	Xenia, O.	2d best boar 2 years or over	10 00
A. C. Grieve & Sons	Xenia, O.	3d best boar 2 years or over	5 00
Chas. E. Keller	Newark, O.	Best boar 18 months and under 24 months	15 00
C. W. Porter	East Millsboro, Pa.	2d best boar 18 months and under 24 months	10 00
A. C. Grieve & Sons	Xenia, O.	3d best boar 18 months and under 24 months	5 00
C. M. & P. A. Beatty	Orient, O.	Best boar 12 months and under 18 months	10 00
A. C. Grieve & Sons	Xenia, O.	2d best boar 12 months and under 18 months	7 00
B. F. Reed	Veedsburg, Ind.	3d best boar 12 months and under 18 months	4 00
Barnhart Bros	Mt. Vernon, O.	Best boar 6 months and under 1 year	10 00
M. C. Brown & Sons	Martinsville, O.	2d best boar 6 months and under 1 year	7 00
Shepard & Osborn	Columbus, O.	3d best boar 6 months and under 1 year	4 00
M. C. Brown & Sons	Martinsville, O.	Best boar under 6 months	10 00
J. W. Townsley	Washington C. H., O.	2d best boar under 6 months	7 00
Chas. E. Keller	Newark, O.	3d best boar under 6 months	4 00
C. W. Porter	East Millsboro, Pa.	Best sow 2 years or over	15 00
A. C. Grieve & Sons	Xenia, O.	2d best sow 2 years or over	10 00
Hert C. Bowen	Wren, O.	3d best sow 2 years or over	5 00
Chas. E. Keller	Newark, O.	Best sow 18 months and under 24	15 00
A. C. Grieve & Sons	Xenia, O.	2d best sow 18 months and under 24	10 00
C. M. & P. A. Beatty	Orient, O.	3d best sow 18 months and under 24	5 00
A. C. Grieve & Sons	Xenia, O.	Best sow 12 months and under 18 months	10 00
E. E. Gantz	Orient, O.	2d best sow 12 months and under 18	7 00
Chas. E. Keller	Newark, O.	3d best sow 12 months and under 18	4 00
M. C. Brown & Sons	Martinsville, O.	Best sow 6 months and under 12	10 00
Conrad & Lampka	Troy, O.	2d best sow 6 months and under 12	7 00
Barnhart Bros	Mt. Vernon, O.	3d best sow 6 months and under 12	4 00
M. C. Brown & Sons	Martinsville, O.	Best sow under 6 months	10 00
Conrad & Lampka	Troy, O.	2d best sow under 6 months	7 00
M. C. Brown & Sons	Martinsville, O.	3d best sow under 6 months	4 00
Breeder's Rings.			
M. C. Brown & Sons	Martinsville, O.	Best 4 swine any age, the get of one boar	20 00
Chas. E. Keller	Newark, O.	2d best 4 swine any age, the get of one boar	10 00
M. C. Brown & Sons	Martinsville, O.	3d best 4 swine any age, the get of one boar	5 00
M. C. Brown & Sons	Martinsville, O.	Best 4 pigs under 6 months, one litter	20 00
Conrad & Lampka	Troy, O.	2d best 4 pigs under 6 months, one litter	10 00
L. E. Jennings	Williamsport, O.	3d best 4 pigs under 6 months, one litter	5 00
A. C. Grieve & Sons	Xenia, O.	Best exhibitor's herd	20 00
Chas. E. Keller	Newark, O.	2d best exhibitor's herd	12 00
C. W. Porter	East Millsboro, Pa.	3d best exhibitor's herd	7 00
M. C. Brown & Sons	Martinsville, O.	Best breeder's young herd	20 00
M. C. Brown & Sons	Martinsville, O.	2d best breeder's young herd	12 00
Barnhart Bros	Mt. Vernon, O.	3d best breeder's young herd	7 00
Champions.			
Chas. E. Keller	Newark, O.	Senior boar 1 year and over	10 00
M. C. Brown & Sons	Martinsville, O.	Junior boar under 1 year	10 00
A. C. Grieve & Sons	Xenia, O.	Senior sow 1 year and over	10 00
M. C. Brown & Sons	Martinsville, O.	Junior sow under 1 year	10 00
Grand Champions.			
Chas. E. Keller	Newark, O.	Boar, any age	10 00
A. C. Grieve & Sons	Xenia, O.	Sow, any age	10 00

HAMPSHIRE.

Name.	Postoffice.	Awards.	Amount.
Sylvester Essig	Tipton, Ind.	Best boar 2 years or over	\$15 00
Dan W. Castor	Bellville, O.	2d best boar 2 years or over	10 00
Adam Alt	Rockford, O.	3d best boar 2 years or over	5 00
Sylvester Essig	Tipton, Ind.	Best boar 18 months and under 24	15 00
E. Field & Son & Co	Camden, O.	2d best boar 18 months and under 24	10 00
Adam Alt	Rockford, O.	3d best boar 18 months and under 24	5 00
E. Field & Son & Co	Camden, O.	Best boar 12 months and under 18	10 00
Sylvester Essig	Tipton, Ind.	2d best boar 12 months and under 18	7 00
Adam Alt	Rockford, O.	3d best boar 12 months and under 18	4 00
Dan W. Castor	Bellville, O.	Best boar 6 months and under 1 year	10 00
Sylvester Essig	Tipton, Ind.	2d best boar 6 months and under 1 year	7 00
Sylvester Essig	Tipton, Ind.	3d best boar 6 months and under 1 year	4 00
Harris & Dildine	Richwood, O.	Best boar under 6 months	10 00
Sylvester Essig	Tipton, Ind.	2d best boar under 6 months	7 00
Harris & Dildine	Richwood, O.	3d best boar under 6 months	4 00

HAMPSHIRE—Concluded.

Name.	Postoffice.	Awards.	Amount.
Adam Alt.	Rockford, O.	Best sow 2 years or over.	\$15 00
Sylvester Essig.	Tipton, Ind.	2d best sow 2 years or over.	10 00
Sylvester Essig.	Tipton, Ind.	3d best sow 2 years or over.	5 00
Sylvester Essig.	Tipton, Ind.	Best sow 18 months and under 24.	15 00
Sylvester Essig.	Tipton, Ind.	2d best sow 18 months and under 24.	10 00
Adam Alt.	Rockford, O.	3d best sow 18 months and under 24.	5 00
Sylvester Essig.	Tipton, Ind.	Best sow 12 months and under 18.	10 00
Dan W. Castor.	Bellville, O.	2d best sow 12 months and under 18.	7 00
Adam Alt.	Rockford, O.	3d best sow 12 months and under 18.	4 00
Sylvester Essig.	Tipton, Ind.	Best sow 6 months and under 12.	10 00
Sylvester Essig.	Tipton, Ind.	2d best sow 6 months and under 12.	7 00
Dan W. Castor.	Bellville, O.	3d best sow 6 months and under 12.	4 00
Dan W. Castor.	Bellville, O.	Best sow under 6 months.	10 00
Harris & Dildine.	Richwood, O.	2d best sow under 6 months.	7 00
Sylvester Essig.	Tipton, Ind.	3d best sow under 6 months.	4 00
Breeder's Rings.			
Sylvester Essig.	Tipton, Ind.	Best 4 swine any age, the get of one boar.	20 00
Dan W. Castor.	Bellville, O.	2d best 4 swine any age, the get of one boar.	10 00
Sylvester Essig.	Tipton, Ind.	3d best 4 swine any age, the get of one boar.	5 00
Harris & Dildine.	Richwood, O.	Best 4 pigs under 6 months, one litter.	20 00
Dan W. Castor.	Bellville, O.	2d best 4 pigs under 6 months, one litter.	10 00
Sylvester Essig.	Tipton, Ind.	3d best 4 pigs under 6 months, one litter.	5 00
Sylvester Essig.	Tipton, Ind.	Best exhibitor's herd.	20 00
Sylvester Essig.	Tipton, Ind.	2d best exhibitor's herd.	12 00
Adam Alt.	Rockford, O.	3d best exhibitor's herd.	7 00
Dan W. Castor.	Bellville, O.	Best breeder's young herd.	20 00
Sylvester Essig.	Tipton, Ind.	2d best breeder's young herd.	12 00
Harris & Dildine.	Richwood, O.	3d best breeder's young herd.	7 00
Champions.			
Sylvester Essig.	Tipton, Ind.	Senior boar 1 year and over.	10 00
Dan W. Castor.	Bellville, O.	Junior boar under 1 year.	10 00
Adam Alt.	Rockford, O.	Senior sow 1 year and over.	10 00
Sylvester Essig.	Tipton, Ind.	Junior sow under 1 year.	10 00
Grand Champions.			
Sylvester Essig.	Tipton, Ind.	Boar, any age.	10 00
Adma Alt.	Rockford, O.	Sow, any age.	10 00

DUROC JERSEYS.

Name.	Postoffice.	Awards.	Amount.
C. J. McLaughlin & Co.	Pleasantville, O.	Best boar 2 years or over.	\$15 00
Martin & Curtis.	Fletcher, O.	2d best boar 2 years or over.	10 00
Mahan Bros.	Osborn, O.	3d best boar 2 years or over.	5 00
Mahan Bros.	Osborn, O.	Best boar 18 months and under 24.	15 00
East Bros.	Lima, O.	2d best boar 18 months and under 24.	10 00
E. C. Stemen & Sons.	Middlepoint, O.	3d best boar 18 months and under 24.	5 00
Mahan Bros.	Osborn, O.	Best boar 12 months and under 18.	10 00
McKee Bros.	Versailles, Ky.	2d best boar 12 months and under 18.	7 00
O. F. Fuson.	DeGraff, O.	3d best boar 12 months and under 18.	4 00
Chas. J. Stuckey & Son.	Mechanicsburg, O.	Best boar 6 months and under 1 year.	10 00
E. C. Stemen & Sons.	Middlepoint, O.	2d best boar 6 months and under 1 year.	7 00
Chas. J. Stuckey & Son.	Mechanicsburg, O.	3d best boar 6 months and under 1 year.	4 00
W. P. Baker.	Wilmington, O.	Best boar under 6 months.	10 00
H. E. Lavelly.	Galloway, O.	2d best boar under 6 months.	7 00
McKee Bros.	Versailles, Ky.	3d best boar under 6 months.	4 00
Mahan Bros.	Osborn, O.	Best sow 2 years or over.	15 00
Mahan Bros.	Osborn, O.	2d best sow 2 years or over.	10 00
McKee Bros.	Versailles, Ky.	3d best sow 2 years or over.	5 00
Mahan Bros.	Osborn, O.	Best sow 18 months and under 24.	15 00
Mahan Bros.	Osborn, O.	2d best sow 18 months and under 24.	10 00
McKee Bros.	Versailles, Ky.	3d best sow 18 months and under 24.	5 00
Mahan Bros.	Osborn, O.	Best sow 12 months and under 18.	10 00
McKee Bros.	Versailles, Ky.	2d best sow 12 months and under 18.	7 00
E. C. Stemen & Sons.	Middlepoint, O.	3d best sow 12 months and under 18.	4 00
Mahan Bros.	Osborn, O.	Best sow 6 months and under 12.	10 00
E. C. Stemen & Sons.	Middlepoint, O.	2d best sow 6 months and under 12.	7 00
E. C. Stemen & Sons.	Middlepoint, O.	3d best sow 6 months and under 12.	4 00
W. P. Baker.	Wilmington, O.	Best sow under 6 months.	10 00
E. C. Stemen & Sons.	Middlepoint, O.	2d best sow under 6 months.	7 00
Jas. H. Bell.	Grove City, O.	3d best sow under 6 months.	4 00

DUROC JERSEYS—Concluded.

Name.	Postoffice.	Awards.	Amount.
Breeder's Rings.			
Mahan Bros.	Osborn, O.	Best 4 swine any age, the get of one boar.	\$20 00
Mahan Bros.	Osborn, O.	2d best 4 swine any age, the get of one boar.	10 00
E. C. Stemen & Sons.	Middlepoint, O.	3d best 4 swine any age, the get of one boar.	5 00
W. P. Baker.	Wilmington, O.	Best 4 pigs under 6 months, one litter.	20 00
E. C. Stemen & Sons.	Middlepoint, O.	2d best 4 pigs under 6 months, one litter.	10 00
Jas. H. Bell.	Grove City, O.	3d best 4 pigs under 6 months, one litter.	5 00
Mahan Bros.	Osborn, O.	Best exhibitor's herd.	20 00
Mahan Bros.	Osborn, O.	2d best exhibitor's herd.	12 00
C. J. McLaughlin & Co.	Pleasantville, O.	3d best exhibitor's herd.	7 00
E. C. Stemen & Sons.	Middlepoint, O.	Best breeder's young herd.	20 00
W. P. Baker.	Wilmington, O.	2d best breeder's young herd.	12 00
Mahan Bros.	Osborn, O.	3d best breeder's young herd.	7 00
Champions.			
C. J. McLaughlin & Co.	Pleasantville, O.	Senior boar 1 year and over.	10 00
Chas. J. Stuckey & Son.	Mechanicsburg, O.	Junior boar under 1 year.	10 00
Mahan Bros.	Osborn, O.	Senior sow 1 year and over.	10 00
Mahan Bros.	Osborn, O.	Junior sow under 1 year.	10 00
Grand Champions.			
C. J. McLaughlin & Co.	Pleasantville, O.	Boar, any age.	10 00
Mahan Bros.	Osborn, O.	Sow, any age.	10 00

YORKSHIRES.

Name.	Postoffice.	Awards.	Amount.
The Wheeler Homestead.	Kanona, N. Y.	Best boar 2 years or over.	\$10 00
F. E. Kite.	St. Paris, O.	2d best boar 2 years or over.	5 00
The Wheeler Homestead.	Kanona, N. Y.	Best boar 18 months and under 24.	10 00
The Wheeler Homestead.	Kanona, N. Y.	Best boar 12 months and under 18.	7 00
W. H. Fisher.	Columbus, O.	2d best boar 12 months and under 18.	4 00
W. H. Fisher.	Columbus, O.	Best boar under 12 months and over 6.	7 00
W. H. Fisher.	Columbus, O.	2d best boar under 12 months and over 6.	4 00
W. H. Fisher.	Columbus, O.	Best boar under 6 months.	5 00
F. E. Kite.	St. Paris, O.	2d best boar under 6 months.	3 00
The Wheeler Homestead.	Kanona, N. Y.	Best sow 2 years or over.	10 00
F. E. Kite.	St. Paris, O.	2d best sow 2 years or over.	5 00
The Wheeler Homestead.	Kanona, N. Y.	Best sow 18 months and under 24.	7 00
F. E. Kite.	St. Paris, O.	2d best sow 18 months and under 24.	4 00
F. E. Kite.	St. Paris, O.	Best sow 12 months and under 18.	7 00
W. H. Fisher.	Columbus, O.	2d best sow 12 months and under 18.	4 00
The Wheeler Homestead.	Kanona, N. Y.	Best sow under 12 months and over 6.	7 00
W. H. Fisher.	Columbus, O.	2d best sow under 12 months and over 6.	4 00
W. H. Fisher.	Columbus, O.	Best sow under 6 months.	5 00
F. E. Kite.	St. Paris, O.	2d best sow under 6 months.	3 00
Breeder's Rings.			
F. E. Kite.	St. Paris, O.	Best 4 swine any age, the get of one boar.	12 00
W. H. Fisher.	Columbus, O.	2d best 4 swine any age, the get of one boar.	6 00
F. E. Kite.	St. Paris, O.	Best 4 pigs under 12 months, one litter.	12 00
W. H. Fisher.	Columbus, O.	2d best 4 pigs under 12 months, one litter.	6 00
Exhibitor's herd.			
F. E. Kite.	St. Paris, O.	Best boar and 3 sows, all over 1 year, owned by exhibitor.	12 00
W. H. Fisher.	Columbus, O.	2d best boar and 3 sows, all over 1 year, owned by exhibitor.	6 00
W. H. Fisher.	Columbus, O.	Best boar and 3 sows, all under 1 year, owned by exhibitor.	12 00
F. E. Kite.	St. Paris, O.	2d best boar and 3 sows, all under 1 year, owned by exhibitor.	6 00

TAMWORTH.

Name.	Postoffice.	Awards.	Amount.
Elmendorf Farms.....	Lexington, Ky.	Best boar 2 years or over.....	\$510 00
Elmendorf Farms.....	Lexington, Ky.	2d best boar 2 years or over.....	5 00
Adams Bros.....	Litchfield, Mich.....	Best boar 18 months and under 24.....	10 00
Adams Bros.....	Litchfield, Mich.....	Best boar 12 months and under 18.....	7 00
Elmendorf Farms.....	Lexington, Ky.	Best boar under 12 months and over 6.....	7 00
Adams Bros.....	Litchfield, Mich.....	2d best boar under 12 months and over 6.....	4 00
Elmendorf Farms.....	Lexington, Ky.	Best boar under 6 months.....	5 00
Elmendorf Farms.....	Lexington, Ky.	2d best boar under 6 months.....	3 00
Elmendorf Farms.....	Lexington, Ky.	Best sow 2 years or over.....	10 00
Adams Bros.....	Litchfield, Mich.....	2d best sow 2 years or over.....	5 00
Adams Bros.....	Litchfield, Mich.....	Best sow 18 months and under 24.....	7 00
Elmendorf Farms.....	Lexington, Ky.	2d best sow 18 months and under 24.....	4 00
Elmendorf Farms.....	Lexington, Ky.	Best sow 12 months and under 18.....	7 00
Elmendorf Farms.....	Lexington, Ky.	2d best sow 12 months and under 18.....	4 00
Elmendorf Farms.....	Lexington, Ky.	Best sow under 12 months and over 6.....	7 00
Elmendorf Farms.....	Lexington, Ky.	2d best sow under 12 months and over 6.....	4 00
Elmendorf Farms.....	Lexington, Ky.	Best sow under 6 months.....	5 00
Elmendorf Farms.....	Lexington, Ky.	2d best sow under 6 months.....	3 00
Breeder's Rings.			
Elmendorf Farms.....	Lexington, Ky.	Best 4 swine any age, the get of one boar.....	12 00
Adams Bros.....	Litchfield, Mich.....	2d best 4 swine any age, the get of one boar.....	6 00
Adams Bros.....	Litchfield, Mich.....	Best 4 pigs under 12 months, one litter.....	12 00
Exhibitor's Herd.			
Elmendorf Farms.....	Lexington, Ky.	Best boar and 3 sows, all over 1 year, owned by exhibitor.....	12 00
Adams Bros.....	Litchfield, Mich.....	2d best boar and 3 sows, all over 1 year, owned by exhibitor.....	6 00
Elmendorf Farms.....	Lexington, Ky.	Best boar and 3 sows, all under 1 year, owned by exhibitor.....	12 00
Elmendorf Farms.....	Lexington, Ky.	2d best boar and 3 sows, all under 1 year, owned by exhibitor.....	6 00

MULE FOOTS.

Name.	Postoffice.	Awards.	Amount.
John H. Dunlap.....	Williamsport, O.....	Best boar 2 years or over.....	\$10 00
R. G. Long.....	Alvada, O.....	2d best boar 2 years or over.....	5 00
John H. Dunlap.....	Williamsport, O.....	Best boar 18 months and under 24.....	10 00
R. G. Long.....	Alvada, O.....	2d best boar 18 months and under 24.....	5 00
John H. Dunlap.....	Williamsport, O.....	Best boar 12 months and under 18.....	7 00
Custard Bros.....	Pleasantville, O.....	2d best boar 12 months and under 18.....	4 00
John H. Dunlap.....	Williamsport, O.....	Best boar under 12 months and over 6.....	7 00
R. G. Long.....	Alvada, O.....	2d best boar under 12 months and over 6.....	4 00
John H. Dunlap.....	Williamsport, O.....	Best boar under 6 months.....	5 00
John H. Dunlap.....	Williamsport, O.....	2d best boar under 6 months.....	3 00
The Glenview Farm.....	Wilmington, O.....	Best sow 2 years or over.....	10 00
G. C. Kreglow.....	Ada, O.....	2d best sow 2 years or over.....	5 00
John H. Dunlap.....	Williamsport, O.....	Best sow 18 months and under 24.....	7 00
R. G. Long.....	Alvada, O.....	2d best sow 18 months and under 24.....	4 00
John H. Dunlap.....	Williamsport, O.....	Best sow 12 months and under 18.....	7 00
G. C. Kreglow.....	Ada, O.....	2d best sow 12 months and under 18.....	4 00
The Glenview Farm.....	Wilmington, O.....	Best sow under 12 months and over 6.....	7 00
John H. Dunlap.....	Williamsport, O.....	2d best sow under 12 months and over 6.....	4 00
John H. Dunlap.....	Williamsport, O.....	Best sow under 6 months.....	5 00
John H. Dunlap.....	Williamsport, O.....	2d best sow under 6 months.....	3 00
Breeder's Rings.			
John H. Dunlap.....	Williamsport, O.....	Best 4 swine any age, the get of one boar.....	12 00
John H. Dunlap.....	Williamsport, O.....	2d best 4 swine any age, the get of one boar.....	6 00
John H. Dunlap.....	Williamsport, O.....	Best 4 pigs under 12 months, one litter.....	12 00
The Glenview Farm.....	Wilmington, O.....	2d best 4 pigs under 12 months, one litter.....	6 00
Exhibitor's Herd.			
John H. Dunlap.....	Williamsport, O.....	Best boar and 3 sows, all over 1 year, owned by exhibitor.....	12 00
John H. Dunlap.....	Williamsport, O.....	2d best boar and 3 sows, all over 1 year, owned by exhibitor.....	6 00
John H. Dunlap.....	Williamsport, O.....	Best boar and 3 sows, all under 1 year, owned by exhibitor.....	12 00
John H. Dunlap.....	Williamsport, O.....	2d best boar and 3 sows, all under 1 year, owned by exhibitor.....	6 00

FOURTH DEPARTMENT—SHEEP.

C. W. McFARLAND, Member in Charge.

O. J. MILLER Superintendent.
 C. D. ROYER Clerk.

JUDGES.

GEO. E. HEISER, D. B. WATT, M. H. THORNTON.

Received from pen rent, 1912.....	\$337 00
Premiums offered, 1912.....	3,942 00
Premiums paid, 1912.....	3,760 00
Total number of entries, 1912—1,495.	
Paid superintendent, judges, ect, 1912.....	\$221 50
Received from pen rent, 1911.....	\$357 50
Premiums offered, 1911.....	3,894 00
Premiums paid, 1911.....	3,687 00
Total number of entries, 1911—1,579.	
Paid superintendent, judges, etc., 1911.....	\$215 60
Received from, pen rent, 1910.....	\$512 50
Premiums offered, 1910.....	3,584 00
Premiums paid, 1910.....	3,412 00
Total number of entries, 1910—1,234.	
Paid superintendent, judges, etc., 1910.....	\$217 30

MERINOS—CLASS A.

Name.	Postoffice.	Awards.	Amount.
W. M. Staley.....	Marysville, O.....	Best ram 2 years or over.....	\$14 00
J. J. Deeds & Son.....	Pataskala, O.....	2d best ram 2 years or over.....	12 00
R. D. Williamson.....	Xenia, O.....	3d best ram 2 years or over.....	10 00
Calhoun Bros.....	Bronson, Mich.....	4th best ram 2 years or over.....	8 00
W. M. Staley.....	Marysville, O.....	5th best ram 2 years or over.....	6 00
D. K. Bell.....	Rochester, N. Y.....	6th best ram 2 years or over.....	4 00
J. J. Deeds & Son.....	Pataskala, O.....	7th best ram 2 years or over.....	3 00
R. D. Williamson.....	Xenia, O.....	8th best ram 2 years or over.....	2 00
David K. Bell.....	Rochester, N. Y.....	Best ram 1 year and under 2.....	14 00
Quinn & Faucet.....	Roxbury, O.....	2d best ram 1 year and under 2.....	12 00
S. Blamer & Son.....	Johnstown, O.....	3d best ram 1 year and under 2.....	10 00
Watson Lovett.....	Quincy, O.....	4th best ram 1 year and under 2.....	8 00
J. P. Walker.....	Gambier, O.....	5th best ram 1 year and under 2.....	6 00
R. D. Williamson.....	Xenia, O.....	6th best ram 1 year and under 2.....	4 00
J. J. Deeds & Son.....	Pataskala, O.....	7th best ram 1 year and under 2.....	3 00
A. H. Dean & Son.....	West Mansfield, O.....	8th best ram 1 year and under 2.....	2 00
R. D. Williamson.....	Xenia, O.....	Best ram under 1 year.....	14 00
J. P. Walker.....	Gambier, O.....	2d best ram under 1 year.....	12 00
E. E. Cleaver.....	West Brownsville, Pa.....	3d best ram under 1 year.....	10 00
Ira A. Cleaver.....	West Brownsville, Pa.....	4th best ram under 1 year.....	8 00
A. H. Dean & Son.....	West Mansfield, O.....	5th best ram under 1 year.....	6 00
J. J. Deeds & Son.....	Pataskala, O.....	6th best ram under 1 year.....	4 00
Watson Lovett.....	Quincy, O.....	7th best ram under 1 year.....	3 00
David K. Bell.....	Rochester, N. Y.....	8th best ram under 1 year.....	2 00
David K. Bell.....	Rochester, N. Y.....	Best ewe 2 years or over.....	14 00
Ira A. Cleaver.....	West Brownsville, Pa.....	2d best ewe 2 years or over.....	12 00
D. K. Bell.....	Rochester, N. Y.....	3d best ewe 2 years or over.....	10 00
Clarence W. Barker.....	Rochester, N. Y.....	4th best ewe 2 years or over.....	8 00
Ira A. Cleaver.....	West Brownsville, Pa.....	5th best ewe 2 years or over.....	6 00
W. M. Staley.....	Marysville, O.....	6th best ewe 2 years or over.....	4 00
R. D. Williamson.....	Xenia, O.....	7th best ewe 2 years or over.....	3 00
J. J. Deeds & Son.....	Pataskala, O.....	8th best ewe 2 years or over.....	2 00
David K. Bell.....	Rochester, N. Y.....	Best ewe 1 year and under 2.....	14 00
W. M. Staley.....	Marysville, O.....	2d best ewe 1 year and under 2.....	12 00
A. H. Dean & Son.....	West Mansfield, O.....	3d best ewe 1 year and under 2.....	10 00
J. J. Deeds & Son.....	Pataskala, O.....	4th best ewe 1 year and under 2.....	8 00
J. P. Walker.....	Gambier, O.....	5th best ewe 1 year and under 2.....	6 00
David K. Bell.....	Rochester, N. Y.....	6th best ewe 1 year and under 2.....	4 00
R. D. Williamson.....	Xenia, O.....	7th best ewe 1 year and under 2.....	3 00
Quinn & Faucett.....	Roxbury, O.....	8th best ewe 1 year and under 2.....	2 00
David K. Bell.....	Rochester, N. Y.....	Best ewe under 1 year.....	14 00
Ira A. Cleaver.....	West Brownsville, Pa.....	2d best ewe under 1 year.....	12 00
W. M. Staley.....	Marysville, O.....	3d best ewe under 1 year.....	10 00
Ira A. Cleaver.....	West Brownsville, Pa.....	4th best ewe under 1 year.....	8 00

MERINOS—CLASS A—Concluded.

Name.	Postoffice.	Awards.	Amount.
R. D. Williamson	Xenia, O.	5th best ewe under 1 year.	\$6 00
Watson Lovett	Quincy, O.	5th best ewe under 1 year.	4 00
Quinn & Faucett	Roxbury, O.	7th best ewe under 1 year.	2 00
A. H. Dean & Son	West Mansfield, O.	8th best ewe under 1 year.	2 00
David K. Bell	Rochester, N. Y.	Best exhibitor's flock.	Ribbon.
W. M. Staley	Marysville, O.	2d best exhibitor's flock.	Ribbon.
R. D. Williamson	Xenia, O.	3d best exhibitor's flock.	Ribbon.
J. J. Deeds & Son	Pataskala, O.	4th best exhibitor's flock.	Ribbon.
Quinn & Faucett	Roxbury, O.	5th best exhibitor's flock.	Ribbon.
David K. Bell	Rochester, N. Y.	Best breeder's young flock.	Ribbon.
Quinn & Faucett	Roxbury, O.	2d best breeder's young flock.	Ribbon.
A. H. Dean & Son	West Mansfield, O.	3d best breeder's young flock.	Ribbon.
J. J. Deeds & Son	Pataskala, O.	4th best breeder's young flock.	Ribbon.
Ira A. Cleaver	West Brownsville, Pa.	Best pen of lambs.	Ribbon.
R. D. Williamson	Xenia, O.	2d best pen of lambs.	Ribbon.
Watson Lovett	Quincy, O.	3d best pen of lambs.	Ribbon.
David K. Bell	Rochester, N. Y.	4th best pen of lambs.	Ribbon.
Quinn & Faucett	Roxbury, O.	5th best pen of lambs.	Ribbon.
Champions.			
W. M. Staley	Marysville, O.	Champion ram, any age.	Ribbon.
David K. Bell	Rochester, N. Y.	Reserve champion ram, any age.	Ribbon.
David K. Bell	Rochester, N. Y.	Champion ewe, any age.	Ribbon.
David K. Bell	Rochester, N. Y.	Reserve champion ewe, any age.	Ribbon.

MERINOS—CLASS B.

Name.	Postoffice.	Awards.	Amount.
W. M. Staley	Marysville, O.	Best ram 2 years or over.	\$14 00
R. D. Williamson	Xenia, O.	2d best ram 2 years or over.	12 00
Uriah Cook & Son	Peoria, O.	3d best ram 2 years or over.	10 00
R. D. Williamson	Xenia, O.	4th best ram 2 years or over.	8 00
S. Blamer & Son	Johnstown, O.	5th best ram 2 years or over.	6 00
Calhoon Bros.	Bronson, Mich.	6th best ram 2 years or over.	4 00
J. F. Walker	Gambier, O.	7th best ram 2 years or over.	3 00
Freed & Stewart	Lancaster, O.	8th best ram 2 years or over.	2 00
W. N. Cook & Son	New London, O.	Best ram 1 year and under 2.	14 00
S. Blamer & Son	Johnstown, O.	2d best ram 1 year and under 2.	12 00
W. M. Staley	Marysville, O.	3d best ram 1 year and under 2.	10 00
S. Blamer & Son	Johnstown, O.	4th best ram 1 year and under 2.	8 00
W. H. Cook & Son	New London, O.	5th best ram 1 year and under 2.	6 00
A. H. Dean & Son	West Mansfield, O.	6th best ram 1 year and under 2.	4 00
Uriah Cook & Son	Peoria, O.	7th best ram 1 year and under 2.	3 00
Calhoon Bros.	Bronson, Mich.	8th best ram 1 year and under 2.	2 00
S. Blamer & Son	Johnstown, O.	Best ram under 1 year.	14 00
A. H. Dean & Son	West Mansfield, O.	2d best ram under 1 year.	12 00
Freed & Stewart	Lancaster, O.	3d best ram under 1 year.	10 00
W. N. Cook & Son	New London, O.	4th best ram under 1 year.	8 00
J. F. Walker	Gambier, O.	5th best ram under 1 year.	6 00
R. D. Williamson	Xenia, O.	6th best ram under 1 year.	4 00
Ira A. Cleaver	West Brownsville, Pa.	7th best ram under 1 year.	3 00
S. Blamer & Son	Johnstown, O.	8th best ram under 1 year.	2 00
W. M. Staley	Marysville, O.	Best ewe 2 years or over.	14 00
R. D. Williamson	Xenia, O.	2d best ewe 2 years or over.	12 00
Calhoon Bros.	Bronson, Mich.	3d best ewe 2 years or over.	10 00
J. J. Deeds & Son	Pataskala, O.	4th best ewe 2 years or over.	8 00
S. Blamer & Son	Johnstown, O.	5th best ewe 2 years or over.	6 00
Ira A. Cleaver	West Brownsville, Pa.	6th best ewe 2 years or over.	4 00
A. H. Dean & Son	West Mansfield, O.	7th best ewe 2 years or over.	3 00
R. D. Williamson	Xenia, O.	8th best ewe 2 years or over.	2 00
A. H. Dean & Son	West Mansfield, O.	Best ewe 1 year and under 2.	14 00
W. N. Cook & Son	New London, O.	2d best ewe 1 year and under 2.	12 00
J. F. Walker	Gambier, O.	3d best ewe 1 year and under 2.	10 00
W. M. Staley	Marysville, O.	4th best ewe 1 year and under 2.	8 00
R. D. Williamson	Xenia, O.	5th best ewe 1 year and under 2.	6 00
A. H. Dean & Son	West Mansfield, O.	6th best ewe 1 year and under 2.	4 00
Quinn & Faucett	Roxbury, O.	7th best ewe 1 year and under 2.	3 00
J. J. Deeds & Son	Pataskala, O.	8th best ewe 1 year and under 2.	2 00
S. Blamer & Son	Johnstown, O.	Best ewe under 1 year.	14 00
R. D. Williamson	Xenia, O.	2d best ewe under 1 year.	12 00
E. E. Cleaver	West Brownsville, Pa.	3d best ewe under 1 year.	10 00
S. Blamer & Son	Johnstown, O.	4th best ewe under 1 year.	8 00
W. N. Cook & Son	New London, O.	5th best ewe under 1 year.	6 00
W. N. Cook & Son	New London, O.	6th best ewe under 1 year.	4 00
Calhoon Bros.	Bronson, Mich.	7th best ewe under 1 year.	3 00

MERINOS—CLASS B—Concluded.

Name.	Postoffice.	Awards.	Amount.
Uriah Cook & Sons	Peoria, O.	8th best ewe under 1 year.	\$2 00
W. M. Staley	Marysville, O.	Best exhibitor's flock.	Ribbon.
W. N. Cook & Son.	New London, O.	2d best exhibitor's flock.	Ribbon.
R. D. Williamson	Xenia, O.	3d best exhibitor's flock.	Ribbon.
S. Blamer & Son	Johnstown, O.	4th best exhibitor's flock.	Ribbon.
A. H. Dean & Son	West Mansfield, O.	5th best exhibitor's flock.	Ribbon.
W. N. Cook & Son.	New London, O.	Best breeder's young flock.	Ribbon.
R. D. Williamson	Xenia, O.	2d best breeder's young flock.	Ribbon.
A. H. Dean & Son.	West Mansfield, O.	3d best breeder's young flock.	Ribbon.
Uriah Cook & Son.	Peoria, O.	4th best breeder's young flock.	Ribbon.
Calhoon Bros.	Bronson, Mich.	5th best breeder's young flock.	Ribbon.
A. H. Dean & Son.	West Mansfield, O.	Best pen of lambs.	Ribbon.
Ira A. Cleaver	West Brownsville, Pa.	2d best pen of lambs.	Ribbon.
W. N. Cook & Son.	New London, O.	3d best pen of lambs.	Ribbon.
Uriah Cook & Son.	Peoria, O.	4th best pen of lambs.	Ribbon.
R. D. Williamson	Xenia, O.	5th best pen of lambs.	Ribbon.
Champions.			
W. M. Staley	Marysville, O.	Champion ram, any age.	Ribbon.
W. N. Cook & Son.	New London, O.	Reserve champion ram, any age.	Reserve.
W. M. Staley	Marysville, O.	Champion ewe, any age.	Ribbon.
A. H. Dean & Son.	West Mansfield, O.	Reserve champion ewe, any age.	Reserve.

MERINOS—CLASS C.

Name.	Postoffice.	Awards.	Amount.
W. N. Cook & Son.	New London, O.	Best ram 2 years or over.	\$14 00
J. J. Deeds & Son.	Pataskala, O.	2d best ram 2 years or over.	12 00
S. Blamer & Son.	Johnstown, O.	3d best ram 2 years or over.	10 00
J. M. Wilson.	Fredericktown, O.	4th best ram 2 years or over.	8 00
J. M. Wilson.	Fredericktown, O.	5th best ram 2 years or over.	6 00
H. Homer Jobe	Xenia, O.	6th best ram 2 years or over.	4 00
Calhoon Bros.	Bronson, Mich.	7th best ram 2 years or over.	3 00
W. N. Cook & Son.	New London, O.	8th best ram 2 years or over.	2 00
S. Blamer & Son.	Johnstown, O.	Best ram 1 year and under 2.	14 00
J. M. Wilson.	Fredericktown, O.	2d best ram 1 year and under 2.	12 00
J. M. Wilson.	Fredericktown, O.	3d best ram 1 year and under 2.	10 00
Calhoon Bros.	Bronson, Mich.	4th best ram 1 year and under 2.	8 00
Uriah Cook & Son.	Peoria, O.	5th best ram 1 year and under 2.	6 00
W. N. Cook & Son.	New London, O.	6th best ram 1 year and under 2.	4 00
W. N. Cook & Son.	New London, O.	7th best ram 1 year and under 2.	3 00
J. W. Warehime.	Salesville, O.	8th best ram 1 year and under 2.	2 00
Calhoon Bros.	Bronson, Mich.	Best ram under 1 year.	14 00
W. N. Cook & Son.	New London, O.	2d best ram under 1 year.	12 00
W. N. Cook & Son.	New London, O.	3d best ram under 1 year.	10 00
J. Krantz & Son.	Canal Dover, O.	4th best ram under 1 year.	8 00
H. Homer Jobe	Xenia, O.	5th best ram under 1 year.	6 00
J. J. Deeds & Son.	Pataskala, O.	6th best ram under 1 year.	4 00
J. F. Walker.	Gambier, O.	7th best ram under 1 year.	3 00
Calhoon Bros.	Bronson, Mich.	8th best ram under 1 year.	2 00
J. M. Wilson.	Fredericktown, O.	Best ewe 2 years or over.	14 00
W. N. Cook & Son.	New London, O.	2d best ewe 2 years or over.	12 00
S. Blamer & Sons.	Johnstown, O.	3d best ewe 2 years or over.	10 00
S. Blamer & Sons.	Johnstown, O.	4th best ewe 2 years or over.	8 00
J. F. Walker.	Gambier, O.	5th best ewe 2 years or over.	6 00
Calhoon Bros.	Bronson, Mich.	6th best ewe 2 years or over.	4 00
Uriah Cook & Son.	Peoria, O.	7th best ewe 2 years or over.	3 00
H. Homer Jobe	Xenia, O.	8th best ewe 2 years or over.	2 00
S. Blamer & Son.	Johnstown, O.	Best ewe 1 year and under 2.	14 00
S. Blamer & Son.	Johnstown, O.	2d best ewe 1 year and under 2.	12 00
D. K. Bell.	Rochester, N. Y.	3d best ewe 1 year and under 2.	10 00
J. Krantz & Son.	Canal Dover, O.	4th best ewe 1 year and under 2.	8 00
W. N. Cook & Son.	New London, O.	5th best ewe 1 year and under 2.	6 00
Calhoon Bros.	Bronson, Mich.	6th best ewe 1 year and under 2.	4 00
J. J. Deeds & Son.	Pataskala, O.	7th best ewe 1 year and under 2.	3 00
H. Homer Jobe	Xenia, O.	8th best ewe 1 year and under 2.	2 00
S. Blamer & Son.	Johnstown, O.	Best ewe under 1 year.	14 00
J. Krantz & Son.	Canal Dover, O.	2d best ewe under 1 year.	12 00
W. N. Cook & Son.	New London, O.	3d best ewe under 1 year.	10 00
Calhoon Bros.	Bronson, Mich.	4th best ewe under 1 year.	8 00
H. Homer Jobe	Xenia, O.	5th best ewe under 1 year.	6 00
W. N. Cook & Son.	New London, O.	6th best ewe under 1 year.	4 00
J. J. Deeds & Son.	Pataskala, O.	7th best ewe under 1 year.	3 00

MERINOS—CLASS C—Concluded.

Name.	Postoffice.	Awards.	Amount.
Calhoon Bros.	Bronson, Mich.	8th best ewe under 1 year.	\$2 00
S. Blamer & Son.	Johnstown, O.	Best exhibitor's flock.	Ribbon.
W. N. Cook & Son.	New London, O.	2d best exhibitor's flock.	Ribbon.
J. M. Wilson.	Fredericktown, O.	3d best exhibitor's flock.	Ribbon.
J. J. Deeds & Son.	Pataskala, O.	4th best exhibitor's flock.	Ribbon.
Calhoon Bros.	Bronson, Mich.	5th best exhibitor's flock.	Ribbon.
W. N. Cook & Son.	New London, O.	Best breeder's young flock.	Ribbon.
Calhoon Bros.	Bronson, Mich.	2d best breeder's young flock.	Ribbon.
J. M. Wilson.	Fredericktown, O.	3d best breeder's young flock.	Ribbon.
J. F. Walker.	Gambier, O.	4th best breeder's young flock.	Ribbon.
Quinn & Faucett.	Roxbury, O.	5th best breeder's young flock.	Ribbon.
W. N. Cook & Son.	New London, O.	Best pen of lambs.	Ribbon.
Calhoon Bros.	Bronson, Mich.	2d best pen of lambs.	Ribbon.
J. F. Walker.	Gambier, O.	3d best pen of lambs.	Ribbon.
Champions.			
W. N. Cook & Son.	New London, O.	Champion ram, any age.	Ribbon.
S. Blamer & Son.	Johnstown, O.	Reserve champion ram, any age.	Ribbon.
J. M. Wilson.	Fredericktown, O.	Champion ewe, any age.	Ribbon.
S. Blamer & Son.	Johnstown, O.	Reserve champion ram, any age.	Ribbon.

FRENCH MERINOS—RAMBOUILLET—CLASS B.

Name.	Postoffice.	Awards.	Amount.
Orth & Mathews.	McGuffey, O.	Best ram 2 years or over.	\$14 00
Orth & Mathews.	McGuffey, O.	2d best ram 2 years or over.	12 00
J. M. Shaw & Son.	Edison, O.	3d best ram 2 years or over.	10 00
L. W. Shaw.	Pottersburg, O.	4th best ram 2 years or over.	8 00
J. B. Herd.	East Liberty, O.	5th best ram 2 years or over.	6 00
J. K. Scott & Co.	Mt. Sterling, O.	6th best ram 2 years or over.	4 00
L. W. Shaw.	Pottersburg, O.	7th best ram 2 years or over.	3 00
Dr. C. H. Solt.	Arlington, O.	8th best ram 2 years or over.	2 00
J. M. Shaw & Son.	Edison, O.	Best ram 1 year and under 2.	14 00
Orth & Mathews.	McGuffey, O.	2d best ram 1 year and under 2.	12 00
L. W. Shaw.	Pottersburg, O.	3d best ram 1 year and under 2.	10 00
L. W. Shaw.	Pottersburg, O.	4th best ram 1 year and under 2.	8 00
Orth & Mathews.	McGuffey, O.	5th best ram 1 year and under 2.	6 00
J. K. Scott & Son.	Mt. Sterling, O.	6th best ram 1 year and under 2.	4 00
J. M. Shaw & Son.	Edison, O.	7th best ram 1 year and under 2.	3 00
J. K. Scott & Co.	Mt. Sterling, O.	8th best ram 1 year and under 2.	2 00
J. M. Shaw & Son.	Edison, O.	Best ram under 1 year.	14 00
Orth & Mathews.	McGuffey, O.	2d best ram under 1 year.	12 00
Orth & Mathews.	McGuffey, O.	3d best ram under 1 year.	10 00
J. K. Scott & Co.	Mt. Sterling, O.	4th best ram under 1 year.	8 00
L. W. Shaw.	Pottersburg, O.	5th best ram under 1 year.	6 00
J. B. Herd.	East Liberty, O.	6th best ram under 1 year.	4 00
J. M. Shaw & Son.	Edison, O.	7th best ram under 1 year.	3 00
J. B. Herd.	East Liberty, O.	8th best ram under 1 year.	2 00
J. M. Shaw & Son.	Edison, O.	Best ewe 2 years or over.	14 00
L. W. Shaw.	Pottersburg, O.	2d best ewe 2 years or over.	12 00
L. W. Shaw.	Pottersburg, O.	3d best ewe 2 years or over.	10 00
J. M. Shaw & Son.	Edison, O.	4th best ewe 2 years or over.	8 00
Orth & Mathews.	McGuffey, O.	5th best ewe 2 years or over.	6 00
H. L. Nash.	Xenia, O.	6th best ewe 2 years or over.	4 00
J. K. Scott & Co.	Mt. Sterling, O.	7th best ewe 2 years or over.	3 00
J. B. Herd.	East Liberty, O.	8th best ewe 2 years or over.	2 00
L. W. Shaw.	Pottersburg, O.	Best ewe 1 year and under 2.	14 00
L. W. Shaw.	Pottersburg, O.	2d best ewe 1 year and under 2.	12 00
Orth & Mathews.	McGuffey, O.	3d best ewe 1 year and under 2.	10 00
Orth & Mathews.	McGuffey, O.	4th best ewe 1 year and under 2.	8 00
J. B. Herd.	East Liberty, O.	5th best ewe 1 year and under 2.	6 00
J. M. Shaw & Son.	Edison, O.	6th best ewe 1 year and under 2.	4 00
J. B. Herd.	East Liberty, O.	7th best ewe 1 year and under 2.	3 00
J. M. Shaw & Son.	Edison, O.	8th best ewe 1 year and under 2.	2 00
J. M. Shaw & Son.	Edison, O.	Best ewe under 1 year.	14 00
L. W. Shaw.	Pottersburg, O.	2d best ewe under 1 year.	12 00
Orth & Mathews.	McGuffey, O.	3d best ewe under 1 year.	10 00
Orth & Mathews.	McGuffey, O.	4th best ewe under 1 year.	8 00
J. B. Herd.	East Liberty, O.	5th best ewe under 1 year.	6 00
J. B. Herd.	East Liberty, O.	6th best ewe under 1 year.	4 00
L. W. Shaw.	Pottersburg, O.	7th best ewe under 1 year.	3 00
J. M. Shaw & Son.	Edison, O.	8th best ewe under 1 year.	2 00
J. M. Shaw & Son.	Edison, O.	Best exhibitor's flock.	Ribbon.

FRENCH MERINOS—RAMBOUILLET—CLASS B—Concluded.

Name.	Postoffice.	Awards.	Amount.
L. W. Shaw	Pottersburg, O.....	2d best exhibitor's flock	Ribbon.
Orth & Mathews	McGuffey, O.....	3d best exhibitor's flock	Ribbon.
J. B. Herd	East Liberty, O.....	4th best exhibitor's flock	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.....	5th best exhibitor's flock	Ribbon.
J. M. Shaw & Son	Edison, O.....	Best breeder's young flock	Ribbon.
L. W. Shaw	Pottersburg, O.....	2d best breeder's young flock	Ribbon.
Orth & Mathews	McGuffey, O.....	3d best breeder's young flock	Ribbon.
J. B. Herd	East Liberty, O.....	4th best breeder's young flock	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.....	5th best breeder's young flock	Ribbon.
J. M. Shaw & Son	Edison, O.....	Best pen of lambs	Ribbon.
Orth & Mathews	McGuffey, O.....	2d best pen of lambs	Ribbon.
L. W. Shaw	Pottersburg, O.....	3d best pen of lambs	Ribbon.
J. B. Herd	East Liberty, O.....	4th best pen of lambs	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.....	5th best pen of lambs	Ribbon.
Champions.			
Orth & Mathews	McGuffey, O.....	Champion ram, any age	Ribbon.
J. M. Shaw & Son	Edison, O.....	Reserve champion ram, any age	Ribbon.
J. M. Shaw & Son	Edison, O.....	Champion ewe, any age	Ribbon.
J. M. Shaw & Son	Edison, O.....	Reserve champion ewe, any age	Ribbon.

COTSWOLDS.

Name.	Postoffice.	Awards.	Amount.
Anoka Farms	Waukesha, Wis.	Best ram 2 years or over	\$10 00
Anoka Farms	Waukesha, Wis.	2d best ram 2 years or over	8 00
M. H. McNeill	New Richmond, O.....	3d best ram 2 years or over	6 00
Peter W. Hintz	Clyde, O.....	4th best ram 2 years or over	4 00
Peter W. Hintz	Clyde, O.....	5th best ram 2 years or over	2 00
Anoka Farms	Waukesha, Wis.	Best ram 1 year and under 2	10 00
Peter W. Hintz	Clyde, O.....	2d best ram 1 year and under 2	8 00
Anoka Farms	Waukesha, Wis.	3d best ram 1 year and under 2	6 00
Peter W. Hintz	Clyde, O.....	4th best ram 1 year and under 2	4 00
M. H. McNeill	New Richmond, O.....	5th best ram 1 year and under 2	2 00
Anoka Farms	Waukesha, Wis.	Best ram under 1 year	8 00
Anoka Farms	Waukesha, Wis.	2d best ram under 1 year	6 00
Peter W. Hintz	Clyde, O.....	3d best ram under 1 year	4 00
Peter W. Hintz	Clyde, O.....	4th best ram under 1 year	3 00
M. H. McNeill	New Richmond, O.....	5th best ram under 1 year	2 00
Peter W. Hintz	Clyde, O.....	Best ewe 2 years or over	10 00
Anoka Farms	Waukesha, Wis.	2d best ewe 2 years or over	8 00
Anoka Farms	Waukesha, Wis.	3d best ewe 2 years or over	6 00
Peter W. Hintz	Clyde, O.....	4th best ewe 2 years or over	4 00
M. H. McNeill	New Richmond, O.....	5th best ewe 2 years or over	2 00
Anoka Farms	Waukesha, Wis.	Best ewe 1 year and under 2	10 00
Anoka Farms	Waukesha, Wis.	2d best ewe 1 year and under 2	8 00
Peter W. Hintz	Clyde, O.....	3d best ewe 1 year and under 2	6 00
Peter W. Hintz	Clyde, O.....	4th best ewe 1 year and under 2	4 00
M. H. McNeill	New Richmond, O.....	5th best ewe 1 year and under 2	2 00
Anoka Farms	Waukesha, Wis.	Best ewe under 1 year	8 00
Anoka Farms	Waukesha, Wis.	2d best ewe under 1 year	6 00
Peter W. Hintz	Clyde, O.....	3d best ewe under 1 year	4 00
Peter W. Hintz	Clyde, O.....	4th best ewe under 1 year	3 00
M. H. McNeill	New Richmond, O.....	5th best ewe under 1 year	2 00
Anoka Farms	Waukesha, Wis.	Best exhibitor's flock	10 00
Anoka Farms	Waukesha, Wis.	2d best exhibitor's flock	8 00
Peter W. Hintz	Clyde, O.....	3d best exhibitor's flock	6 00
M. H. McNeill	New Richmond, O.....	4th best exhibitor's flock	4 00
Peter W. Hintz	Clyde, O.....	5th best exhibitor's flock	2 00
Peter W. Hintz	Clyde, O.....	Best breeder's young flock	10 00
M. H. McNeill	New Richmond, O.....	2d best breeder's young flock	8 00
Peter W. Hintz	Clyde, O.....	Best pen of lambs	10 00
M. H. McNeill	New Richmond, O.....	2d best pen of lambs	8 00
Champions.			
Anoka Farms	Waukesha, Wis.	Champion ram, any age	Ribbon.
Anoka Farms	Waukesha, Wis.	Reserve champion ram, any age	Ribbon.
Anoka Farms	Waukesha, Wis.	Champion ewe, any age	Ribbon.
Anoka Farms	Waukesha, Wis.	Reserve champion ewe, any age	Ribbon.

OXFORD DOWNS.

Name.	Postoffice.	Awards.	Amount.
G. W. Heskett, Jr.	Fulton, O.	Best ram 2 years or over.	\$10 00
J. C. Williamson & Son.	Xenia, O.	2d best ram 2 years or over.	8 00
Ers Chambers & Son.	Mansfield, O.	3d best ram 2 years or over.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ram 2 years or over.	4 00
G. W. Heskett, Jr.	Fulton, O.	5th best ram 2 years or over.	2 00
J. C. Williamson.	Xenia, O.	Best ram 1 year and under 2.	10 00
G. W. Heskett, Jr.	Fulton, O.	2d best ram 1 year and under 2.	8 00
A. Simenton.	Black Heath, Ont.	3d best ram 1 year and under 2.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ram 1 year and under 2.	4 00
A. Simenton.	Black Heath, Ont.	Best ram under 1 year.	8 00
J. C. Williamson & Son.	Xenia, O.	2d best ram under 1 year.	6 00
A. Simenton.	Black Heath, Ont.	3d best ram under 1 year.	4 00
G. W. Heskett, Jr.	Fulton, O.	4th best ram under 1 year.	3 00
J. C. Williamson & Son.	Xenia, O.	5th best ram under 1 year.	2 00
J. C. Williamson & Son.	Xenia, O.	Best ewe 2 years or over.	10 00
G. W. Heskett, Jr.	Fulton, O.	2d best ewe 2 years or over.	8 00
A. Simenton.	Black Heath, Ont.	3d best ewe 2 years or over.	6 00
G. W. Heskett, Jr.	Fulton, O.	4th best ewe 2 years or over.	4 00
J. C. Williamson & Son.	Xenia, O.	5th best ewe 2 years or over.	2 00
G. W. Heskett, Jr.	Fulton, O.	Best ewe 1 year and under 2.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best ewe 1 year and under 2.	8 00
A. Simenton.	Black Heath, Ont.	3d best ewe 1 year and under 2.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ewe 1 year and under 2.	4 00
A. Simenton.	Black Heath, Ont.	5th best ewe 1 year and under 2.	2 00
J. C. Williamson & Son.	Xenia, O.	Best ewe under 1 year.	8 00
A. Simenton.	Black Heath, Ont.	2d best ewe under 1 year.	6 00
G. W. Heskett, Jr.	Fulton, O.	3d best ewe under 1 year.	4 00
A. Simenton.	Black Heath, Ont.	4th best ewe under 1 year.	3 00
J. C. Williamson & Son.	Xenia, O.	5th best ewe under 1 year.	2 00
G. W. Heskett, Jr.	Fulton, O.	Best exhibitor's flock.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best exhibitor's flock.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best exhibitor's flock.	6 00
A. Simenton.	Black Heath, Ont.	4th best exhibitor's flock.	4 00
A. Simenton.	Black Heath, Ont.	Best breeder's young flock.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best breeder's young flock.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best breeder's young flock.	6 00
A. Simenton.	Black Heath, Ont.	Best pen of lambs.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best pen of lambs.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best pen of lambs.	6 00

SHROPSHIRE.

Name.	Postoffice.	Awards.	Amount.
L. B. Palmer.	Pataskala, O.	Best ram 2 years or over.	\$10 00
Anoka Farms.	Waukesha, Wis.	2d best ram 2 years or over.	8 00
Jesse C. Andrews.	West Point, Ind.	3d best ram 2 years or over.	6 00
H. W. Chaffee.	Brecksville, O.	4th best ram 2 years or over.	4 00
L. H. Ross.	Bucyrus, O.	5th best ram 2 years or over.	2 00
Ers Chambers & Son.	Mansfield, O.	Best ram 1 year and under 2.	10 00
L. B. Palmer.	Pataskala, O.	2d best ram 1 year and under 2.	8 00
Jesse C. Andrews.	West Point, Ind.	3d best ram 1 year and under 2.	6 00
R. & W. Postle.	Camp Chase, O.	4th best ram 1 year and under 2.	4 00
Walter D. Postle.	Camp Chase, O.	5th best ram 1 year and under 2.	2 00
H. W. Chaffee.	Brecksville, O.	Best ram under 1 year.	8 00
Jesse C. Andrews.	West Point, Ind.	2d best ram under 1 year.	6 00
Anoka Farms.	Waukesha, Wis.	3d best ram under 1 year.	4 00
L. H. Ross.	Bucyrus, O.	4th best ram under 1 year.	3 00
L. B. Palmer.	Pataskala, O.	5th best ram under 1 year.	2 00
Anoka Farms.	Waukesha, Wis.	Best ewe 2 years or over.	10 00
Ers Chambers & Son.	Mansfield, O.	2d best ewe 2 years or over.	8 00
R. & W. Postle.	Camp Chase, O.	3d best ewe 2 years or over.	6 00
Anoka Farms.	Waukesha, Wis.	4th best ewe 2 years or over.	4 00
Jesse C. Andrews.	West Point, Ind.	5th best ewe 2 years or over.	2 00
Jesse C. Andrews.	West Point, Ind.	Best ewe 1 year and under 2.	10 00
Jesse C. Andrews.	West Point, Ind.	2d best ewe 1 year and under 2.	8 00
Anoka Farms.	Waukesha, Wis.	3d best ewe 1 year and under 2.	6 00
Anoka Farms.	Waukesha, Wis.	4th best ewe 1 year and under 2.	4 00
Ers Chambers & Son.	Mansfield, O.	5th best ewe 1 year and under 2.	2 00
Anoka Farms.	Waukesha, Wis.	Best ewe under 1 year.	8 00
Jesse C. Andrews.	West Point, Ind.	2d best ewe under 1 year.	6 00
Ers Chambers & Son.	Mansfield, O.	3d best ewe under 1 year.	4 00
L. H. Ross.	Bucyrus, O.	4th best ewe under 1 year.	3 00
L. B. Palmer.	Pataskala, O.	5th best ewe under 1 year.	2 00
Ers Chambers & Son.	Mansfield, O.	Best exhibitor's flock.	10 00
Anoka Farms.	Waukesha, Wis.	2d best exhibitor's flock.	8 00

FRENCH MERINOS—RAMBOUILLET—CLASS B—Concluded.

Name.	Postoffice.	Awards.	Amount.
L. W. Shaw	Pottersburg, O.	2d best exhibitor's flock.	Ribbon.
Orth & Mathews.	McGuffey, O.	3d best exhibitor's flock.	Ribbon.
J. B. Herd.	East Liberty, O.	4th best exhibitor's flock.	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.	5th best exhibitor's flock.	Ribbon.
J. M. Shaw & Son.	Edison, O.	Best breeder's young flock.	Ribbon.
L. W. Shaw	Pottersburg, O.	2d best breeder's young flock.	Ribbon.
Orth & Mathews.	McGuffey, O.	3d best breeder's young flock.	Ribbon.
J. B. Herd.	East Liberty, O.	4th best breeder's young flock.	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.	5th best breeder's young flock.	Ribbon.
J. M. Shaw & Son.	Edison, O.	Best pen of lambs.	Ribbon.
Orth & Mathews.	McGuffey, O.	2d best pen of lambs.	Ribbon.
L. W. Shaw	Pottersburg, O.	3d best pen of lambs.	Ribbon.
J. B. Herd.	East Liberty, O.	4th best pen of lambs.	Ribbon.
J. K. Scott & Co.	Mt. Sterling, O.	5th best pen of lambs.	Ribbon.
Champions.			
Orth & Mathews.	McGuffey, O.	Champion ram, any age.	Ribbon.
J. M. Shaw & Son.	Edison, O.	Reserve champion ram, any age.	Ribbon.
J. M. Shaw & Son.	Edison, O.	Champion ewe, any age.	Ribbon.
J. M. Shaw & Son.	Edison, O.	Reserve champion ewe, any age.	Ribbon.

COTSWOLDS.

Name.	Postoffice.	Awards.	Amount.
Anoka Farms	Waukesha, Wis.	Best ram 2 years or over.	\$10 00
Anoka Farms	Waukesha, Wis.	2d best ram 2 years or over.	8 00
M. H. McNeill.	New Richmond, O.	3d best ram 2 years or over.	6 00
Peter W. Hintz.	Clyde, O.	4th best ram 2 years or over.	4 00
Peter W. Hintz.	Clyde, O.	5th best ram 2 years or over.	2 00
Anoka Farms	Waukesha, Wis.	Best ram 1 year and under 2.	10 00
Peter W. Hintz.	Clyde, O.	2d best ram 1 year and under 2.	8 00
Anoka Farms	Waukesha, Wis.	3d best ram 1 year and under 2.	6 00
Peter W. Hintz.	Clyde, O.	4th best ram 1 year and under 2.	4 00
M. H. McNeill.	New Richmond, O.	5th best ram 1 year and under 2.	2 00
Anoka Farms	Waukesha, Wis.	Best ram under 1 year.	8 00
Anoka Farms	Waukesha, Wis.	2d best ram under 1 year.	6 00
Peter W. Hintz.	Clyde, O.	3d best ram under 1 year.	4 00
Peter W. Hintz.	Clyde, O.	4th best ram under 1 year.	3 00
M. H. McNeill.	New Richmond, O.	5th best ram under 1 year.	2 00
Peter W. Hintz.	Clyde, O.	Best ewe 2 years or over.	10 00
Anoka Farms	Waukesha, Wis.	2d best ewe 2 years or over.	8 00
Anoka Farms	Waukesha, Wis.	3d best ewe 2 years or over.	6 00
Peter W. Hintz.	Clyde, O.	4th best ewe 2 years or over.	4 00
M. H. McNeill.	New Richmond, O.	5th best ewe 2 years or over.	2 00
Anoka Farms	Waukesha, Wis.	Best ewe 1 year and under 2.	10 00
Anoka Farms	Waukesha, Wis.	2d best ewe 1 year and under 2.	8 00
Peter W. Hintz.	Clyde, O.	3d best ewe 1 year and under 2.	6 00
Peter W. Hintz.	Clyde, O.	4th best ewe 1 year and under 2.	4 00
M. H. McNeill.	New Richmond, O.	5th best ewe 1 year and under 2.	2 00
Anoka Farms	Waukesha, Wis.	Best ewe under 1 year.	8 00
Anoka Farms	Waukesha, Wis.	2d best ewe under 1 year.	6 00
Peter W. Hintz.	Clyde, O.	3d best ewe under 1 year.	4 00
Peter W. Hintz.	Clyde, O.	4th best ewe under 1 year.	3 00
M. H. McNeill.	New Richmond, O.	5th best ewe under 1 year.	2 00
Anoka Farms	Waukesha, Wis.	Best exhibitor's flock.	10 00
Anoka Farms	Waukesha, Wis.	2d best exhibitor's flock.	8 00
Peter W. Hintz.	Clyde, O.	3d best exhibitor's flock.	6 00
M. H. McNeill.	New Richmond, O.	4th best exhibitor's flock.	4 00
Peter W. Hintz.	Clyde, O.	5th best exhibitor's flock.	2 00
Peter W. Hintz.	Clyde, O.	Best breeder's young flock.	10 00
M. H. McNeill.	New Richmond, O.	2d best breeder's young flock.	8 00
Peter W. Hintz.	Clyde, O.	Best pen of lambs.	10 00
M. H. McNeill.	New Richmond, O.	2d best pen of lambs.	8 00
Champions.			
Anoka Farms	Waukesha, Wis.	Champion ram, any age.	Ribbon.
Anoka Farms	Waukesha, Wis.	Reserve champion ram, any age.	Ribbon.
Anoka Farms	Waukesha, Wis.	Champion ewe, any age.	Ribbon.
Anoka Farms	Waukesha, Wis.	Reserve champion, any age.	Ribbon.

OXFORD DOWNS.

Name.	Postoffice.	Awards.	Amount.
G. W. Heskett, Jr.	Fulton, O.	Best ram 2 years or over.	\$10 00
J. C. Williamson & Son.	Xenia, O.	2d best ram 2 years or over.	8 00
Ers Chambers & Son.	Mansfield, O.	3d best ram 2 years or over.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ram 2 years or over.	4 00
G. W. Heskett, Jr.	Fulton, O.	5th best ram 2 years or over.	2 00
J. C. Williamson.	Xenia, O.	Best ram 1 year and under 2.	10 00
G. W. Heskett, Jr.	Fulton, O.	2d best ram 1 year and under 2.	8 00
A. Simenton.	Black Heath, Ont.	3d best ram 1 year and under 2.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ram 1 year and under 2.	4 00
A. Simenton.	Black Heath, Ont.	Best ram under 1 year.	8 00
J. C. Williamson & Son.	Xenia, O.	2d best ram under 1 year.	6 00
A. Simenton.	Black Heath, Ont.	3d best ram under 1 year.	4 00
G. W. Heskett, Jr.	Fulton, O.	4th best ram under 1 year.	3 00
J. C. Williamson & Son.	Xenia, O.	5th best ram under 1 year.	2 00
J. C. Williamson & Son.	Xenia, O.	Best ewe 2 years or over.	10 00
G. W. Heskett, Jr.	Fulton, O.	2d best ewe 2 years or over.	8 00
A. Simenton.	Black Heath, Ont.	3d best ewe 2 years or over.	6 00
G. W. Heskett, Jr.	Fulton, O.	4th best ewe 2 years or over.	4 00
J. C. Williamson & Son.	Xenia, O.	5th best ewe 2 years or over.	2 00
G. W. Heskett, Jr.	Fulton, O.	Best ewe 1 year and under 2.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best ewe 1 year and under 2.	8 00
A. Simenton.	Black Heath, Ont.	3d best ewe 1 year and under 2.	6 00
J. C. Williamson & Son.	Xenia, O.	4th best ewe 1 year and under 2.	4 00
A. Simenton.	Black Heath, Ont.	5th best ewe 1 year and under 2.	2 00
J. C. Williamson & Son.	Xenia, O.	Best ewe under 1 year.	8 00
A. Simenton.	Black Heath, Ont.	2d best ewe under 1 year.	6 00
G. W. Heskett, Jr.	Fulton, O.	3d best ewe under 1 year.	4 00
A. Simenton.	Black Heath, Ont.	4th best ewe under 1 year.	3 00
J. C. Williamson & Son.	Xenia, O.	5th best ewe under 1 year.	2 00
G. W. Heskett, Jr.	Fulton, O.	Best exhibitor's flock.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best exhibitor's flock.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best exhibitor's flock.	6 00
A. Simenton.	Black Heath, Ont.	4th best exhibitor's flock.	4 00
A. Simenton.	Black Heath, Ont.	Best breeder's young flock.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best breeder's young flock.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best breeder's young flock.	6 00
A. Simenton.	Black Heath, Ont.	Best pen of lambs.	10 00
J. C. Williamson & Son.	Xenia, O.	2d best pen of lambs.	8 00
J. C. Williamson & Son.	Xenia, O.	3d best pen of lambs.	6 00

SHROPSHIRE.

Name.	Postoffice.	Awards.	Amount.
L. B. Palmer.	Pataskala, O.	Best ram 2 years or over.	\$10 00
Anoka Farms.	Waukesha, Wis.	2d best ram 2 years or over.	8 00
Jesse C. Andrews.	West Point, Ind.	3d best ram 2 years or over.	6 00
H. W. Chaffee.	Brecksville, O.	4th best ram 2 years or over.	4 00
L. H. Ross.	Bucyrus, O.	5th best ram 2 years or over.	2 00
Ers Chambers & Son.	Mansfield, O.	Best ram 1 year and under 2.	10 00
L. B. Palmer.	Pataskala, O.	2d best ram 1 year and under 2.	8 00
Jesse C. Andrews.	West Point, Ind.	3d best ram 1 year and under 2.	6 00
R. & W. Postle.	Camp Chase, O.	4th best ram 1 year and under 2.	4 00
Walter D. Postle.	Camp Chase, O.	5th best ram 1 year and under 2.	2 00
H. W. Chaffee.	Brecksville, O.	Best ram under 1 year.	8 00
Jesse C. Andrews.	West Point, Ind.	2d best ram under 1 year.	6 00
Anoka Farms.	Waukesha, Wis.	3d best ram under 1 year.	4 00
L. H. Ross.	Bucyrus, O.	4th best ram under 1 year.	3 00
L. B. Palmer.	Pataskala, O.	5th best ram under 1 year.	2 00
Anoka Farms.	Waukesha, Wis.	Best ewe 2 years or over.	10 00
Ers Chambers & Son.	Mansfield, O.	2d best ewe 2 years or over.	8 00
R. & W. Postle.	Camp Chase, O.	3d best ewe 2 years or over.	6 00
Anoka Farms.	Waukesha, Wis.	4th best ewe 2 years or over.	4 00
Jesse C. Andrews.	West Point, Ind.	5th best ewe 2 years or over.	2 00
Jesse C. Andrews.	West Point, Ind.	Best ewe 1 year and under 2.	10 00
Jesse C. Andrews.	West Point, Ind.	2d best ewe 1 year and under 2.	8 00
Anoka Farms.	Waukesha, Wis.	3d best ewe 1 year and under 2.	6 00
Anoka Farms.	Waukesha, Wis.	4th best ewe 1 year and under 2.	4 00
Ers Chambers & Son.	Mansfield, O.	5th best ewe 1 year and under 2.	2 00
Anoka Farms.	Waukesha, Wis.	Best ewe under 1 year.	8 00
Jesse C. Andrews.	West Point, Ind.	2d best ewe under 1 year.	6 00
Ers Chambers & Son.	Mansfield, O.	3d best ewe under 1 year.	4 00
L. H. Ross.	Bucyrus, O.	4th best ewe under 1 year.	3 00
L. B. Palmer.	Pataskala, O.	5th best ewe under 1 year.	2 00
Ers Chambers & Son.	Mansfield, O.	Best exhibitor's flock.	10 00
Anoka Farms.	Waukesha, Wis.	2d best exhibitor's flock.	8 00

SHROPSHIRE—Concluded.

Name.	Postoffice.	Awards.	Amount.
Jesse C. Andrews	West Point, Ind.	3d best exhibitor's flock	\$6 00
L. B. Palmer	Pataskala, O.	4th best exhibitor's flock	4 00
H. W. Chaffee	Brecksville, O.	5th best exhibitor's flock	2 00
Jesse C. Andrews	West Point, Ind.	Best breeder's young flock	10 00
H. W. Chaffee	Brecksville, O.	2d best breeder's young flock	8 00
L. B. Palmer	Pataskala, O.	3d best breeder's young flock	6 00
Pearl Wurtz	Attica, O.	4th best breeder's young flock	4 00
G. E. Stallsmith	Urbana, O.	5th best breeder's young flock	2 00
Jesse C. Andrews	West Point, Ind.	Best pen of lambs	10 00
L. H. Ross	Bucyrus, O.	2d best pen of lambs	8 00
H. W. Chaffee	Brecksville, O.	3d best pen of lambs	6 00
Pearl Wurtz	Attica, O.	4th best pen of lambs	4 00
L. B. Palmer	Pataskala, O.	5th best pen of lambs	2 00
Champions.			
Ers Chambers & Son	Mansfield, O.	Champion ram, any age	Ribbon.
L. B. Palmer	Pataskala, O.	Reserve champion ram, any age	Ribbon.
Jesse C. Andrews	West Point, Ind.	Champion ewe, any age	Ribbon.
Anaka Farms	Waukesha, Wis.	Reserve Champion ewe, any age	Ribbon.

OHIO BRED SHROPSHIRE.

Name.	Postoffice.	Awards.	Amount.
H. W. Chaffee	Brecksville, O.	Best ram 2 years or over	\$5 00
R. & W. Postle	Camp Chase, O.	2d best ram 2 years or over	5 00
L. B. Palmer	Pataskala, O.	3d best ram 2 years or over	4 00
Ers Chapman & Son.	Mansfield, O.	4th best ram 2 years or over	4 00
R. & W. Postle	Camp Chase, O.	5th best ram 2 years or over	3 00
T. E. Woodward	Brecksville, O.	6th best ram 2 years or over	2 00
R. & W. Postle	Camp Chase, O.	Best ram 1 year and under 2	5 00
L. B. Palmer	Pataskala, O.	2d best ram 1 year and under 2	5 00
Walter D. Postle	Camp Chase, O.	3d best ram 1 year and under 2	4 00
H. W. Chaffee	Brecksville, O.	4th best ram 1 year and under 2	4 00
Jas. D. Hanna	Rawson, O.	5th best ram 1 year and under 2	3 00
Walter D. Postle	Camp Chase, O.	6th best ram 1 year and under 2	2 00
H. W. Chaffee	Brecksville, O.	Best ram under 1 year	4 00
L. H. Ross	Bucyrus, O.	2d best ram under 1 year	4 00
L. H. Ross	Bucyrus, O.	3d best ram under 1 year	3 00
L. B. Palmer	Pataskala, O.	4th best ram under 1 year	3 00
Pearl Wurtz	Attica, O.	5th best ram under 1 year	2 00
H. W. Chaffee	Brecksville, O.	6th best ram under 1 year	2 00
R. & W. Postle	Camp Chase, O.	Best ewe 2 years or over	5 00
L. B. Palmer	Pataskala, O.	2d best ewe 2 years or over	5 00
L. H. Ross	Bucyrus, O.	3d best ewe 2 years or over	4 00
Ers Chambers & Son	Mansfield, O.	4th best ewe 2 years or over	4 00
L. B. Palmer	Pataskala, O.	5th best ewe 2 years or over	3 00
H. W. Chaffee	Brecksville, O.	6th best ewe 2 years or over	2 00
H. W. Chaffee	Brecksville, O.	Best ewe 1 year and under 2	5 00
Jas. D. Hanna	Rawson, O.	2d best ewe 1 year and under 2	5 00
Pearl Wurtz	Attica, O.	3d best ewe 1 year and under 2	4 00
L. B. Palmer	Pataskala, O.	4th best ewe 1 year and under 2	4 00
L. B. Palmer	Pataskala, O.	5th best ewe 1 year and under 2	3 00
Geo. E. Stallsmith	Urbana, O.	6th best ewe 1 year and under 2	2 00
L. H. Ross	Bucyrus, O.	Best ewe under 1 year	4 00
H. W. Chaffee	Brecksville, O.	2d best ewe under 1 year	4 00
Pearl Wurtz	Attica, O.	3d best ewe under 1 year	3 00
H. W. Chaffee	Brecksville, O.	4th best ewe under 1 year	3 00
Walter D. Postle	Camp Chase, O.	5th best ewe under 1 year	2 00
Jas. D. Hanna	Rawson, O.	6th best ewe under 1 year	2 00
H. W. Chaffee	Brecksville, O.	Best exhibitor's flock	5 00
L. B. Palmer	Pataskala, O.	2d best exhibitor's flock	5 00
R. & W. Postle	Camp Chase, O.	3d best exhibitor's flock	4 00
L. H. Ross	Bucyrus, O.	4th best exhibitor's flock	4 00
Pearl Wurtz	Attica, O.	5th best exhibitor's flock	3 00
Jas. D. Hanna	Rawson, O.	6th best exhibitor's flock	2 00
H. W. Chaffee	Brecksville, O.	Best breeder's young flock	10 00
J. B. Palmer	Pataskala, O.	2d best breeder's young flock	8 00
Jas. D. Hanna	Rawson, O.	3d best breeder's young flock	6 00
Pearl Wurtz	Attica, O.	4th best breeder's young flock	4 00
Geo. E. Stallsmith	Urbana, O.	5th best breeder's young flock	3 00
Walter D. Postle	Camp Chase, O.	6th best breeder's young flock	2 00
H. W. Chaffee	Brecksville, O.	Best pen of lambs	5 00
L. H. Ross	Bucyrus, O.	2d best pen of lambs	5 00
L. B. Palmer	Pataskala, O.	3d best pen of lambs	4 00

OHIO BRED SHROPSHIRE—Concluded.

Name.	Postoffice.	Awards.	Amount.
Pearl Wurtz.....	Attica, O.....	4th best pen of lambs.....	\$4 00
Geo. E. Stallsmith.....	Urbana, O.....	5th best pen of lambs.....	2 00
R. & W. Postle.....	Camp Chase, O.....	6th best pen of lambs.....	2 00
Champions.			
H. W. Chaffee.....	Brecksville, O.....	Champion ram, any age.....	Ribbon.
W. D. Postle.....	Camp Chase, O.....	Champion ram, any age.....	Reserve
H. W. Chaffee.....	Brecksville, O.....	Champion ewe, any age.....	Ribbon.
W. D. Postle.....	Camp Chase, O.....	Champion ewe, any age.....	Reserve
			Ribbon.

HAMPSHIRE DOWNS.

Name.	Postoffice.	Awards.	Amount.
Walnut Hall Farms.....	Donerail, Ky.....	Best ram 2 years or over.....	\$10 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best ram 2 years or over.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best ram 2 years or over.....	6 00
C. L. Mitchell.....	Lucas, O.....	4th best ram 2 years or over.....	4 00
W. J. Cherry.....	Xenia, O.....	5th best ram 2 years or over.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best ram 1 year and under 2.....	10 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best ram 1 year and under 2.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best ram 1 year and under 2.....	6 00
C. L. Mitchell.....	Lucas, O.....	4th best ram 1 year and under 2.....	4 00
W. J. Cherry.....	Xenia, O.....	5th best ram 1 year and under 2.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best ram under 1 year.....	8 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best ram under 1 year.....	6 00
W. J. Cherry.....	Xenia, O.....	3d best ram under 1 year.....	4 00
W. J. Cherry.....	Xenia, O.....	4th best ram under 1 year.....	3 00
C. L. Mitchell.....	Lucas, O.....	5th best ram under 1 year.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best ewe 2 years or over.....	10 00
C. L. Mitchell.....	Lucas, O.....	2d best ewe 2 years or over.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best ewe 2 years or over.....	6 00
Walnut Hall Farms.....	Donerail, Ky.....	4th best ewe 2 years or over.....	4 00
W. J. Cherry.....	Xenia, O.....	5th best ewe 2 years or over.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best ewe 1 year and under 2.....	10 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best ewe 1 year and under 2.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best ewe 1 year and under 2.....	6 00
C. L. Mitchell.....	Lucas, O.....	4th best ewe 1 year and under 2.....	4 00
W. J. Cherry.....	Xenia, O.....	5th best ewe 1 year and under 2.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best ewe under 1 year.....	8 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best ewe under 1 year.....	6 00
C. L. Mitchell.....	Lucas, O.....	3d best ewe under 1 year.....	4 00
W. J. Cherry.....	Xenia, O.....	4th best ewe under 1 year.....	3 00
W. J. Cherry.....	Xenia, O.....	4th best ewe under 1 year.....	3 00
W. J. Cherry.....	Xenia, O.....	5th best ewe under 1 year.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best exhibitor's flock.....	10 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best exhibitor's flock.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best exhibitor's flock.....	6 00
C. L. Mitchell.....	Lucas, O.....	4th best exhibitor's flock.....	4 00
W. J. Cherry.....	Xenia, O.....	5th best exhibitor's flock.....	2 00
Walnut Hall Farms.....	Donerail, Ky.....	Best breeder's young flock.....	10 00
C. L. Mitchell.....	Lucas, O.....	2d best breeder's young flock.....	8 00
W. J. Cherry.....	Xenia, O.....	3d best breeder's young flock.....	6 00
Walnut Hall Farms.....	Donerail, Ky.....	Best pen of lambs.....	10 00
Walnut Hall Farms.....	Donerail, Ky.....	2d best pen of lambs.....	8 00
W. J. Cherry.....	Xenia, O.....	3d best pen of lambs.....	6 00
C. L. Mitchell.....	Lucas, O.....	4th best pen of lambs.....	4 00

SOUTH DOWNS.

Name.	Postoffice.	Awards.	Amount.
C. L. Mitchell.....	Lucas, O.....	Best ram 2 years or over.....	\$10 00
W. H. Compton.....	Monroe, O.....	2d best ram 2 years or over.....	8 00
C. L. Mitchell.....	Lucas, O.....	3d best ram 2 years or over.....	6 00
R. C. Watt & Son.....	Cedarville, O.....	4th best ram 2 years or over.....	4 00
W. H. Compton.....	Monroe, O.....	5th best ram 2 years or over.....	2 00
R. W. Palmer.....	Pataskala, O.....	Best ram 1 year and under 2.....	10 00
C. L. Mitchell.....	Lucas, O.....	2d best ram 1 year and under 2.....	8 00
W. H. Compton.....	Monroe, O.....	3d best ram 1 year and under 2.....	6 00

SOUTH DOWNS—Concluded.

Name.	Postoffice.	Awards.	Amount.
W. H. Compton	Monroe, O.	4th best ram 1 year and under 2.	\$4 00
R. C. Watt & Son	Cedarville, O.	5th best ram 1 year and under 2.	2 00
W. H. Compton	Monroe, O.	Best ram under 1 year.	8 00
R. W. Palmer	Pataskala, O.	2d best ram under 1 year.	6 00
R. C. Watt & Son	Cedarville, O.	3d best ram under 1 year.	4 00
W. H. Compton	Monroe, O.	4th best ram under 1 year.	3 00
R. C. Watt & Son	Cedarville, O.	5th best ram under 1 year.	2 00
R. C. Watt & Son	Cedarville, O.	Best ewe 2 years or over.	10 00
R. W. Palmer	Pataskala, O.	2d best ewe 2 years or over.	8 00
C. L. Mitchell	Lucas, O.	3d best ewe 2 years or over.	6 00
R. W. Palmer	Pataskala, O.	4th best ewe 2 years or over.	4 00
W. H. Compton	Monroe, O.	5th best ewe 2 years or over.	2 00
W. H. Compton	Monroe, O.	Best ewe 1 year and under 2.	10 00
R. C. Watt & Son	Cedarville, O.	2d best ewe 1 year and under 2.	8 00
W. H. Compton	Monroe, O.	3d best ewe 1 year and under 2.	6 00
R. W. Palmer	Pataskala, O.	4th best ewe 1 year and under 2.	4 00
C. L. Mitchell	Lucas, O.	5th best ewe 1 year and under 2.	2 00
W. H. Compton	Monroe, O.	Best ewe under 1 year.	8 00
W. H. Compton	Monroe, O.	2d best ewe under 1 year.	6 00
R. C. Watt & Son	Cedarville, O.	3d best ewe under 1 year.	4 00
R. W. Palmer	Pataskala, O.	4th best ewe under 1 year.	3 00
R. C. Watt & Son	Cedarville, O.	5th best ewe under 1 year.	2 00
R. C. Watt & Son	Cedarville, O.	Best exhibitor's flock.	10 00
W. H. Compton	Monroe, O.	2d best exhibitor's flock.	8 00
R. W. Palmer	Pataskala, O.	3d best exhibitor's flock.	6 00
C. L. Mitchell	Lucas, O.	4th best exhibitor's flock.	4 00
W. H. Compton	Monroe, O.	5th best exhibitor's flock.	2 00
W. H. Compton	Monroe, O.	Best breeder's young flock.	10 00
R. C. Watt & Son	Cedarville, O.	2d best breeder's young flock.	8 00
C. L. Mitchell	Lucas, O.	3d best breeder's young flock.	6 00
W. H. Compton	Monroe, O.	Best pen of lambs.	10 00
R. C. Watt & Son	Cedarville, O.	2d best pen of lambs.	8 00
C. L. Mitchell	Lucas, O.	3d best pen of lambs.	6 00
T. D. Postle	Camp Chase, O.	4th best pen of lambs.	4 00
Chmapions.			
C. L. Mitchell	Lucas, O.	Champion ram, any age.	Ribbon.
R. W. Palmer	Pataskala, O.	Reserve champion ram, any age.	Ribbon.
R. C. Watt & Son	Cedarville, O.	Champion ewe, any age.	Ribbon.
W. H. Compton	Monroe, O.	Reserve champion ewe, any age.	Ribbon.

LINCOLNS.

Name.	Postoffice.	Awards.	Amount.
W. S. Lethbridge	Alliance, Ont.	Best ram 2 years or over.	\$10 00
J. G. Lethbridge	Alliance, Ont.	2d best ram 2 years or over.	8 00
J. R. Bickett	Xenia, O.	3d best ram 2 years or over.	6 00
J. R. Bickett	Xenia, O.	4th best ram 2 years or over.	4 00
C. S. Rice	Spencer, O.	5th best ram 2 years or over.	2 00
J. G. Lethbridge	Alliance, Ont.	Best ram 1 year and under 2.	10 00
J. G. Lethbridge	Alliance, Ont.	2d best ram 1 year and under 2.	8 00
J. R. Bickett	Xenia, O.	3d best ram 1 year and under 2.	6 00
W. S. Lethbridge	Alliance, Ont.	4th best ram 1 year and under 2.	4 00
J. G. Lethbridge	Alliance, Ont.	Best ram under 1 year.	8 00
W. S. Lethbridge	Alliance, Ont.	2d best ram under 1 year.	6 00
J. R. Bickett	Xenia, O.	3d best ram under 1 year.	4 00
W. S. Lethbridge	Alliance, Ont.	4th best ram under 1 year.	3 00
W. A. Lile & Sons	West Liberty, O.	5th best ram under 1 year.	2 00
J. G. Lethbridge	Alliance, Ont.	Best ewe 2 years or over.	10 00
J. R. Bickett	Xenia, O.	2d best ewe 2 years or over.	8 00
A. C. Fielder	DeGraff, O.	3d best ewe 2 years or over.	6 00
J. G. Lethbridge	Alliance, Ont.	4th best ewe 2 years or over.	4 00
J. R. Bickett	Xenia, O.	5th best ewe 2 years or over.	2 00
J. G. Lethbridge	Alliance, O.	Best ewe 1 year and under 2.	10 00
J. G. Lethbridge	Alliance, Ont.	2d best ewe 1 year and under 2.	8 00
W. S. Lethbridge	Alliance, Ont.	3d best ewe 1 year and under 2.	6 00
J. R. Bickett	Xenia, O.	4th best ewe 1 year and under 2.	4 00
A. C. Fielder	DeGraff, O.	5th best ewe 1 year and under 2.	2 00
J. G. Lethbridge	Alliance, Ont.	Best ewe under 1 year.	8 00
J. G. Lethbridge	Alliance, Ont.	2d best ewe under 1 year.	6 00
W. S. Lethbridge	Alliance, Ont.	3d best ewe under 1 year.	4 00
W. S. Lethbridge	Alliance, Ont.	4th best ewe under 1 year.	3 00

LINCOLNS—Concluded.

Name.	Postoffice.	Awards.	Amount.
J. R. Bickett	Xenia, O.	5th best ewe under 1 year	\$2 00
J. G. Lethbridge	Alliance, Ont.	Best exhibitor's flock	10 00
J. G. Lethbridge	Alliance, Ont.	2d best exhibitor's flock	8 00
R. Bickett	Xenia, O.	3d best exhibitor's flock	6 00
R. Bickett	Xenia, O.	4th best exhibitor's flock	4 00
C. S. Rice	Spencer, O.	5th best exhibitor's flock	2 00
J. G. Lethbridge	Alliance, Ont.	Best breeder's young flock	10 00
W. S. Lethbridge	Alliance, Ont.	2d best breeder's young flock	8 00
J. R. Bickett	Xenia, O.	3d best breeder's young flock	6 00
C. L. Rice	Spencer, O.	4th best breeder's young flock	4 00
J. G. Lethbridge	Alliance, Ont.	Best pen of lambs	10 00
R. Bickett	Xenia, O.	2d best pen of lambs	8 00
W. A. Lile & Son	West Liberty, O.	3d best pen of lambs	6 00
C. L. Rice	Spencer, O.	4th best pen of lambs	4 00
J. G. Lethbridge	Alliance, Ont.	Champion ram, any age	Ribbon.
J. G. Lethbridge	Alliance, Ont.	Reserve champion ram, any age	Ribbon.
J. G. Lethbridge	Alliance, Ont.	Champion ewe, any age	Ribbon.
J. G. Lethbridge	Alliance, Ont.	Reserve champion ewe, any age	Ribbon.

DORSETS.

Name.	Postoffice.	Awards.	Amount.
H. H. Cherry	Xenia, O.	Best ram 2 years or over	\$10 00
J. B. Henderson	Burgettstown, Pa.	2d best ram 2 years or over	8 00
H. H. Cherry	Xenia, O.	3d best ram 2 years or over	6 00
Nash Bros.	Tipton, Ind.	4th best ram 2 years or over	4 00
Nash Bros.	Tipton, Ind.	5th best ram 2 years or over	2 00
H. H. Cherry	Xenia, O.	Best ram 1 year and under 2	10 00
Nash Bros.	Tipton, Ind.	2d best ram 1 year and under 2	8 00
J. B. Henderson	Burgettstown, Pa.	3d best ram 1 year and under 2	6 00
Nash Bros.	Tipton, Ind.	4th best ram 1 year and under 2	4 00
H. H. Cherry	Xenia, O.	Best ram under 1 year	8 00
Nash Bros.	Tipton, Ind.	2d best ram under 1 year	6 00
J. B. Henderson	Burgettstown, Pa.	3d best ram under 1 year	4 00
H. H. Cherry	Xenia, O.	4th best ram under 1 year	3 00
Nash Bros.	Tipton, Ind.	5th best ram under 1 year	2 00
J. B. Henderson	Burgettstown, Pa.	Best ewe 2 years or over	10 00
Nash Bros.	Tipton, Ind.	2d best ewe 2 years or over	8 00
H. H. Cherry	Xenia, O.	3d best ewe 2 years or over	6 00
J. B. Henderson	Burgettstown, Pa.	4th best ewe 2 years or over	4 00
H. H. Cherry	Xenia, O.	5th best ewe 2 years or over	2 00
Nash Bros.	Tipton, Ind.	Best ewe 1 year and under 2	10 00
J. B. Henderson	Burgettstown, Pa.	2d best ewe 1 year and under 2	8 00
H. H. Cherry	Xenia, O.	3d best ewe 1 year and under 2	6 00
H. H. Cherry	Xenia, O.	4th best ewe 1 year and under 2	4 00
Nash Bros.	Tipton, Ind.	5th best ewe 1 year and under 2	2 00
Nash Bros.	Tipton, Ind.	Best ewe under 1 year	8 00
J. B. Henderson	Burgettstown, Pa.	2d best ewe under 1 year	6 00
H. H. Cherry	Xenia, O.	3d best ewe under 1 year	4 00
J. B. Henderson	Burgettstown, Pa.	4th best ewe under 1 year	3 00
Nash Bros.	Tipton, Ind.	5th best ewe under 1 year	2 00
H. H. Cherry	Xenia, O.	Best exhibitor's flock	10 00
Nash Bros.	Tipton, Ind.	2d best exhibitor's flock	8 00
J. B. Henderson	Burgettstown, Pa.	3d best exhibitor's flock	6 00
H. H. Cherry	Xenia, O.	4th best exhibitor's flock	4 00
Nash Bros.	Tipton, Ind.	5th best exhibitor's flock	2 00
H. H. Cherry	Xenia, O.	Best breeder's young flock	10 00
J. B. Henderson	Burgettstown, Pa.	2d best breeder's young flock	8 00
Nash Bros.	Tipton, Ind.	3d best breeder's young flock	6 00
H. H. Cherry	Xenia, O.	Best pen of lambs	10 00
Nash Bros.	Tipton, Ind.	2d best pen of lambs	8 00
J. B. Henderson	Burgettstown, Pa.	3d best pen of lambs	6 00
Nash Bros.	Tipton, Ind.	4th best pen of lambs	4 00

CHEVIOTS.

Name.	Postoffice.	Awards.	Amount.
G. W. Parnell	Wingate, Ind.	Best ram 2 years or over.	\$10 00
Raymond D. Grieve	Xenia, O.	2d best ram 2 years or over.	8 00
G. W. Parnell	Wingate, Ind.	3d best ram 2 years or over.	6 00
R. & W. Postle	Camp Chase, O.	4th best ram 2 years or over.	4 00
R. & W. Postle	Camp Chase, O.	5th best ram 2 years or over.	2 00
G. W. Parnell	Wingate, Ind.	Best ram 1 year and under 2.	10 00
R. & W. Postle	Camp Chase, O.	2d best ram 1 year and under 2.	8 00
G. W. Parnell	Wingate, Ind.	3d best ram 1 year and under 2.	6 00
Raymond D. Grieve	Xenia, O.	4th best ram 1 year and under 2.	4 00
R. & W. Postle	Camp Chase, O.	5th best ram 1 year and under 2.	2 00
G. W. Parnell	Wingate, Ind.	Best ram under 1 year.	8 00
R. & W. Postle	Camp Chase, O.	2d best ram under 1 year.	6 00
R. & W. Postle	Camp Chase, O.	3d best ram under 1 year.	4 00
R. & W. Postle	Camp Chase, O.	4th best ram under 1 year.	3 00
Raymond D. Grieve	Xenia, O.	5th best ram under 1 year.	2 00
R. & W. Postle	Camp Chase, O.	Best ewe 2 years or over.	10 00
R. & W. Postle	Camp Chase, O.	2d best ewe 2 years or over.	8 00
G. W. Parnell	Wingate, Ind.	3d best ewe 2 years or over.	6 00
Raymond D. Grieve	Xenia, O.	4th best ewe 2 years or over.	4 00
G. W. Parnell	Wingate, Ind.	5th best ewe 2 years or over.	2 00
G. W. Parnell	Wingate, Ind.	Best ewe 1 year and under 2.	10 00
Raymond D. Grieve	Xenia, O.	2d best ewe 1 year and under 2.	8 00
R. & W. Postle	Camp Chase, O.	3d best ewe 1 year and under 2.	6 00
G. W. Parnell	Wingate, Ind.	4th best ewe 1 year and under 2.	4 00
R. & W. Postle	Camp Chase, O.	5th best ewe 1 year and under 2.	2 00
G. W. Parnell	Wingate, Ind.	Best ewe under 1 year.	8 00
R. & W. Postle	Camp Chase, O.	2d best ewe under 1 year.	6 00
G. W. Parnell	Wingate, Ind.	3d best ewe under 1 year.	4 00
Raymond D. Grieve	Xenia, O.	4th best ewe under 1 year.	3 00
R. & W. Postle	Camp Chase, O.	5th best ewe under 1 year.	2 00
G. W. Parnell	Wingate, Ind.	Best exhibitor's flock.	10 00
R. & W. Postle	Camp Chase, O.	2d best exhibitor's flock.	8 00
Raymond D. Grieve	Xenia, O.	3d best exhibitor's flock.	6 00
G. W. Parnell	Wingate, Ind.	4th best exhibitor's flock.	4 00
R. & W. Postle	Camp Chase, O.	5th best exhibitor's flock.	2 00
G. W. Parnell	Wingate, Ind.	Best breeder's young flock.	10 00
R. & W. Postle	Camp Chase, O.	2d best breeder's young flock.	8 00
Raymond D. Grieve	Xenia, O.	3d best breeder's young flock.	6 00
G. W. Parnell	Wingate, Ind.	Best pen of lambs.	10 00
R. & W. Postle	Camp Chase, O.	2d best pen of lambs.	8 00
R. D. Grieve	Xenia, O.	3d best pen of lambs.	6 00
G. W. Parnell	Wingate, Ind.	Champion ram, any age.	Ribbon.
G. W. Parnell	Wingate, Ind.	Reserve champion ram, any age.	Ribbon.
R. & W. Postle	Camp Chase, O.	Champion ewe, any age.	Ribbon.
G. W. Parnell	Wingate, Ind.	Reserve champion ewe, any age.	Ribbon.

FAT SHEEP.

Name.	Postoffice.	Awards.	Amount.
J. G. Lethbridge	Alliance, Ont.	Best wether 1 year and under 2.	\$8 00
T. D. Postle	Camp Chase, O.	2d best wether 1 year and under 2.	5 00
T. D. Postle	Camp Chase, O.	Best wether lamb.	8 00
T. D. Postle	Camp Chase, O.	2d best wether lamb.	5 00
T. D. Postle	Camp Chase, O.	Best pen of wethers, any age.	12 00
J. B. Henderson	Burgettstown, Pa.	2d best pen of wethers, any age.	6 00
T. D. Postle	Camp Chase, O.	Best pen of 5 wether lambs.	12 00

WOOL EXHIBIT.

Name.	Postoffice.	Awards.	Amount.
S. M. Cleaver	Delaware, O.	Best American Merino (Class A).	\$4 00
J. J. Deeds & Son	Pataskala, O.	2d best American Merino (Class A).	3 00
Ira A. Cleaver	West Brownsville, Pa.	3d best American Merino (Class A).	2 00
J. F. Walker	Gambier, O.	Best American Merino (Class B).	4 00
Ira A. Cleaver	West Brownsville, Pa.	2d best American Merino (Class B).	3 00
S. M. Cleaver	Delaware, O.	3d best American Merino (Class B).	2 00

WOOL EXHIBIT—Concluded.

Name.	Postoffice.	Awards.	Amount.
J. J. Deeds & Son.....	Pataskala, O.....	Best American Merino (Class C).....	\$4 00
J. F. Walker.....	Gambier, O.....	2d best American Merino (Class C).....	3 00
J. W. Robertson.....	Cadiz, O.....	3d best American Merino (Class C).....	2 00
Orth & Mathews.....	McGuffey, O.....	Best Rambouillet.....	4 00
Orth & Mathews.....	McGuffey, O.....	2d best Rambouillet.....	3 00
L. B. Palmer.....	Pataskala, O.....	Best Shropshire.....	4 00
L. B. Palmer.....	Pataskala, O.....	2d best Shropshire.....	3 00
R. W. Palmer.....	Pataskala, O.....	Best Southdown.....	4 00
W. J. Cherry.....	Xenia, O.....	Best Hampshire.....	4 00
W. J. Cherry.....	Xenia, O.....	2d best Hampshire.....	3 00
R. & W. Postle.....	Camp Chase, O.....	Best Cheviot.....	4 00
J. B. Henderson.....	Burgettstown, Pa.....	Best Dorset.....	4 00
J. B. Henderson.....	Burgettstown, Pa.....	2d best Dorset.....	3 00
M. H. McNeill.....	New Richmond, O.....	Best Cotswold.....	4 00
M. H. McNeill.....	New Richmond, O.....	2d best Cotswold.....	3 00
J. R. Bickett.....	Xenia, O.....	Best Lincoln.....	4 00
J. R. Bickett.....	Xenia, O.....	2d best Lincoln.....	3 00

COMMERCIAL CLASSES AND GRADES.

Name.	Postoffice.	Awards.	Amount.
C. O. Herd.....	Marysville, O.....	Best fine XX fleeces.....	\$3 00
C. O. Herd.....	Marysville, O.....	2d best fine XX fleeces.....	2 00
J. J. Deeds & Son.....	Pataskala, O.....	3d best fine XX fleeces.....	1 00
C. O. Herd.....	Marysville, O.....	Best fine X fleeces.....	3 00
J. F. Walker.....	Gambier, O.....	Best $\frac{1}{2}$ blood combing.....	3 00
C. O. Herd.....	Marysville, O.....	2d best $\frac{1}{2}$ blood combing.....	2 00
C. O. Herd.....	Marysville, O.....	3d best $\frac{1}{2}$ blood combing.....	1 00
C. O. Herd.....	Marysville, O.....	Best 3-8 blood combing.....	3 00
C. O. Herd.....	Marysville, O.....	2d best 3-8 blood combing.....	2 00
L. B. Palmer.....	Pataskala, O.....	3d best 3-8 blood combing.....	1 00
L. B. Palmer.....	Pataskala, O.....	Best $\frac{1}{2}$ blood combing.....	3 00
C. O. Herd.....	Marysville, O.....	2d best $\frac{1}{2}$ blood combing.....	2 00
C. O. Herd.....	Marysville, O.....	3d best $\frac{1}{2}$ blood clothing.....	1 00
C. O. Herd.....	Marysville, O.....	2d best 3-8 blood clothing.....	2 00
C. O. Herd.....	Marysville, O.....	3d best 3-8 blood clothing.....	1 00
C. O. Herd.....	Marysville, O.....	Best braid.....	3 00
M. H. McNeill.....	New Richmond, O.....	2d best braid.....	2 00
J. R. Bickett.....	Xenia, O.....	3d best braid.....	1 00

FIFTH DEPARTMENT—POULTRY.

C. W. McFARLAND, Member in Charge.

JOHN T. HEIZER Superintendent
H. S. LYBARGER Clerk

JUDGES

EUGENE SITES, CHAS. V. KEELER, F. J. MARSHALL.

Received from entry fees, 1912 \$1,048 00
Premiums offered, 1912 2,083 00
Premiums paid, 1912 1,740 00
Total Number of Entries, 1911—2,495

Paid superintendents, judges, etc., 1912 \$321 00

Received from entry fees, 1911 \$808 25
Premiums offered, 1911 1,816 00
Premiums paid, 1911 1,415 00
Total Number of Entries, 1912—1,552

Paid superintendents, judges, etc \$216 50

Received from entry fees, 1910 \$971 75
Premiums offered, 1910 1,924 25
Premiums paid, 1910 1,624 75
Total Number of Entries, 1910—1,790

Paid superintendents, judges, etc., 1910 \$198 50

Name.	Postoffice.	Awards.	Amount.
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AMERICAN CLASS—BARRED PLYMOUTH ROCK.

James Corfman.....	Leipsic, O.....	Best cock.....	\$2 00
Michener & Seas.....	Orrville, O.....	2d best cock.....	1 00
Hartman Stock Farm.....	Columbus, O.....	3d best cock.....	50
James Corfman.....	Leipsic, O.....	Best cockerel.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best cockerel.....	1 00
Dr. Geo. M. Boone.....	Coshocton, O.....	3d best cockerel.....	50
Hartman Stock Farm.....	Columbus, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
James Corfman.....	Leipsic, O.....	3d best hen.....	50
Michener & Seas.....	Orrville, O.....	Best pullet.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best pullet.....	1 00
E. P. Roloson.....	Delaware, O.....	3d best pullet.....	50
Hartman Stock Farm.....	Columbus, O.....	Best breeding pen.....	3 00
James Corfman.....	Leipsic, O.....	2d best breeding pen.....	2 00
Michener & Seas.....	Orrville, O.....	3d best breeding pen.....	1 00

WHITE PLYMOUTH ROCK.

Michener & Seas.....	Orrville, O.....	Best cock.....	\$2 00
S. P. McCabe.....	Columbus, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
Geo. S. Moore.....	Clintonville, O.....	Best cockerel.....	2 00
Geo. S. Moore.....	Clintonville, O.....	2d best cockerel.....	1 00
Osbun Poultry Farm.....	Mansfield, O.....	3d best cockerel.....	50
Geo. S. Moore.....	Clintonville, O.....	Best hen.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best hen.....	1 00
Geo. S. Moore.....	Clintonville, O.....	3d best hen.....	50
Geo. S. Moore.....	Clintonville, O.....	Best pullet.....	2 00
Osbun Poultry Farm.....	Mansfield, O.....	2d best pullet.....	1 00
Osbun Poultry Farm.....	Mansfield, O.....	3d best pullet.....	50
S. P. McCabe.....	Columbus, O.....	Best breeding pen.....	3 00
Geo. S. Moore.....	Clintonville, O.....	2d best breeding pen.....	2 00
Geo. S. Moore.....	Clintonville, O.....	3d best breeding pen.....	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
BUFF PLYMOUTH ROCK.			
Michener & Seas.....	Orrville, O.....	Best cock.....	\$2 00
Nelson & Chambers.....	Doylestown, O.....	2d best cock.....	1 00
W. S. Limes.....	Linden Heights, O.....	3d best cock.....	1 50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
W. S. Limes.....	Linden Heights, O.....	3d best cockerel.....	1 50
Michener & Seas.....	Orrville, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
W. S. Limes.....	Linden Heights, O.....	3d best hen.....	1 50
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
W. S. Limes.....	Linden Heights.....	2d best pullet.....	1 00
F. H. Ricketts.....	Coshocton.....	3d best pullet.....	1 50
Michener & Seas.....	Orrville, O.....	Best breeding pen.....	3 00
Julius Frank & Sons.....	Akron, O.....	2d best breeding pen.....	2 00
W. S. Limes.....	Linden Heights, O.....	3d best breeding pen.....	1 00
PARTRIDGE PLYMOUTH ROCK.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Frank Recob.....	Springfield, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cock.....	1 50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
R. W. Mead.....	Norwalk, O.....	2d best cockerel.....	1 00
R. W. Mead.....	Norwalk, O.....	3d best cockerel.....	1 50
Frank Recob.....	Springfield, O.....	Best hen.....	2 00
R. W. Mead.....	Norwalk, O.....	2d best hen.....	1 00
Frank Recob.....	Springfield, O.....	3d best hen.....	1 50
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
Frank Recob.....	Springfield, O.....	2d best pullet.....	1 00
Frank Recob.....	Springfield, O.....	3d best pullet.....	1 50
Michener & Seas.....	Orrville, O.....	Best breeding pen.....	3 00
R. W. Mead.....	Norwalk, O.....	2d best breeding pen.....	2 00
COLUMBIAN PLYMOUTH ROCK.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
M. B. Shaw.....	Cardington, O.....	2d best cock.....	1 00
Trout & Nusser.....	Postoria, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cockerel.....	1 50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
M. B. Shaw.....	Cardington, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	1 50
M. B. Shaw.....	Cardington, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Michener & Seas.....	Orrville, O.....	3d best pullet.....	1 50
Michener & Seas.....	Orrville, O.....	Best breeding pen.....	3 00
COLUMBIAN WYANDOTTE.			
Walter E. Hughson.....	Clay, N. Y.....	Best cock.....	\$2 00
Chas. McClave.....	New London, O.....	2d best cock.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best cock.....	1 50
Walter E. Hughson.....	Clay, N. Y.....	Best cockerel.....	2 00
Walter E. Hughson.....	Clay, N. Y.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cockerel.....	1 50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Michener & Seas.....	Orrville, O.....	2d best hen.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best hen.....	1 50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
M. B. Shaw.....	Cardington, O.....	2d best pullet.....	1 00
Walter E. Hughson.....	Clay, N. Y.....	3d best pullet.....	1 50
M. B. Shaw.....	Cardington, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00
SILVER WYANDOTTE.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
G. F. Stewart.....	Coshocton, O.....	2d best cock.....	1 00
D. L. Ziegler.....	Delaware, O.....	3d best cock.....	1 50
Wm. Champion.....	Mt. Vernon, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
G. F. Stewart.....	Coshocton, O.....	3d best cockerel.....	1 50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
G. F. Stewart.....	Coshocton, O.....	2d best hen.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best hen.....	1 50
Wm. Champion.....	Mt. Vernon, O.....	Best pullet.....	2 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	1 00
G. F. Stewart.....	Coshocton, O.....	3d best pullet.....	1 50
Cyrus B. Austin.....	Delaware, O.....	Best breeding pen.....	3 00
Jas. Skeen & Son.....	Clintonville, O.....	2d best breeding pen.....	2 00
Julius Frank & Sons.....	Akron, O.....	3d best breeding pen.....	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
GOLDEN WYANDOTTE.			
Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
C. S. McGrath.....	Apple Creek, O.....	2d best cock.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cock.....	50
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
C. S. McGrath.....	Apple Creek, O.....	3d best cockerel.....	50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00
C. S. McGrath.....	Apple Creek, O.....	2d best pullet.....	1 00
C. S. McGrath.....	Apple Creek, O.....	3d best pullet.....	50
Michener & Seas.....	Orrville, O.....	Best breeding pen.....	3 00
Chas. McClave.....	New London, O.....	2d best breeding pen.....	2 00

WHITE WYANDOTTE.

Sherman Bowden.....	Mansfield, O.....	Best cock.....	\$2 00
Sherman Bowden.....	Mansfield, O.....	2d best cock.....	1 00
Hartman Stock Farm.....	Columbus, O.....	3d best cock.....	50
Hartman Stock Farm.....	Columbus, O.....	Best cockerel.....	2 00
Sherman Bowden.....	Mansfield, O.....	2d best cockerel.....	1 00
Hartman Stock Farm.....	Columbus, O.....	3d best cockerel.....	50
Sherman Bowden.....	Mansfield, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
College Hill Poultry Farm.....	Cincinnati, O.....	3d best hen.....	50
Sherman Bowden.....	Mansfield, O.....	Best pullet.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best pullet.....	1 00
Sherman Bowden.....	Mansfield, O.....	3d best pullet.....	50
Hartman Stock Farm.....	Columbus, O.....	Best breeding pen.....	3 00
Sherman Bowden.....	Mansfield, O.....	2d best breeding pen.....	2 00
Sherman Bowden.....	Mansfield, O.....	3d best breeding pen.....	1 00

BLACK WYANDOTTE.

F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Fostoria, O.....	2d best cock.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best cock.....	50
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
Michener & Seas.....	Orrville, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cockerel.....	50
Trout & Nusser.....	Fostoria, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best hen.....	50
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00
Michener & Seas.....	Orrville, O.....	2d best pullet.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best pullet.....	50
Trout & Nusser.....	Fostoria, O.....	Best breeding pen.....	3 00
Frank C. Sites.....	North Dover, O.....	2d best breeding pen.....	2 00
Wilson & Chambers.....	Doylestown, O.....	3d best breeding pen.....	1 00

BUFF WYANDOTTE.

Hartman Stock Farm.....	Columbus, O.....	Best cock.....	\$2 00
Hartman Stock Farm.....	Columbus, O.....	2d best cock.....	1 00
Hartman Stock Farm.....	Columbus, O.....	3d best cock.....	50
Hartman Stock Farm.....	Columbus, O.....	Best cockerel.....	2 00
Paul R. Scott.....	Clintonville, O.....	2d best cockerel.....	1 00
Gerald Williams.....	Wellington, O.....	3d best cockerel.....	50
Hartman Stock Farm.....	Columbus, O.....	Best hen.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best hen.....	1 00
Hartman Stock Farm.....	Columbus, O.....	3d best hen.....	50
Hartman Stock Farm.....	Columbus, O.....	Best pullet.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best pullet.....	1 00
Gerald Williams.....	Wellington, O.....	3d best pullet.....	50
Hartman Stock Farm.....	Columbus, O.....	Best breeding pen.....	3 00
Hartman Stock Farm.....	Columbus, O.....	2d best breeding pen.....	2 00
Hartman Stock Farm.....	Columbus, O.....	3d best breeding pen.....	1 00

PARTRIDGE WYANDOTTE.

Sheffield Farm.....	Glendale, O.....	Best cock.....	\$2 00
Sheffield Farm.....	Glendale, O.....	2d best cock.....	1 00
Sheffield Farm.....	Glendale, O.....	3d best cock.....	50
Sheffield Farm.....	Glendale, O.....	Best cockerel.....	2 00
Sheffield Farm.....	Glendale, O.....	2d best cockerel.....	1 00
Sheffield Farm.....	Glendale, O.....	3d best cockerel.....	50
Sheffield Farm.....	Glendale, O.....	Best hen.....	2 00
Sheffield Farm.....	Glendale, O.....	2d best hen.....	1 00
Sheffield Farm.....	Glendale, O.....	3d best hen.....	50

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
PARTRIDGE WYANDOTTE—Concluded.			
Sheffield Farm.....	Glendale, O.....	Best pullet.....	\$2 00
Sheffield Farm.....	Glendale, O.....	2d best pullet.....	1 00
Sheffield Farm.....	Glendale, O.....	3d best pullet.....	50
Sheffield Farm.....	Glendale, O.....	Best breeding pen.....	3 00
Sheffield Farm.....	Glendale, O.....	2d best breeding pen.....	2 00
Sheffield Farm.....	Glendale, O.....	3d best breeding pen.....	1 00
SILVER PENCILED WYANDOTTE.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
Michener & Seas.....	Orrville, O.....	2d best cockerel.....	1 00
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best hen.....	1 00
C. W. Smith.....	Cardington, O.....	3d best hen.....	50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
Michener & Seas.....	Orrville, O.....	2d best pullet.....	1 00
BLACK JAVA.			
Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Fostoria, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
Chas. McClave.....	New London, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Chas. McClave.....	New London, O.....	2d best hen.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best hen.....	50
Russell Crum.....	Upper Sandusky, O.....	Best pullet.....	2 00
Chas. McClave.....	New London, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
Chas. McClave.....	New London, O.....	Best breeding pen.....	3 00
BUCKEYE RED.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Michener & Seas.....	Orrville, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
Wilson Bros.....	Springfield, O.....	3d best cockerel.....	50
Wilson & Chambers.....	Doylstown, O.....	Best hen.....	2 00
Chas. McClave.....	New London, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
Trout & Nusser.....	Fostoria, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
R. C. RHODE ISLAND RED.			
C. S. Anglemeyer.....	Leetonia, O.....	Best cock.....	\$2 00
Chas. McClave.....	New London, O.....	2d best cock.....	1 00
E. L. Ustick.....	Columbus, O.....	3d best cock.....	50
Wm. Monesmith.....	Columbus, O.....	Best cockerel.....	2 00
Michener & Seas.....	Orrville, O.....	2d best cockerel.....	1 00
Wm. Monesmith.....	Columbus, O.....	3d best cockerel.....	50
Michener & Seas.....	Orrville, O.....	Best hen.....	2 00
Chas. McClave.....	New London, O.....	2d best hen.....	1 00
W. A. Dumond.....	Columbus, O.....	Best pullet.....	2 00
W. S. Limes.....	Linden Heights, O.....	2d best pullet.....	1 00
W. S. Dumond.....	Columbus, O.....	3d best pullet.....	50
L. G. Cary.....	Trimble, O.....	Best breeding pen.....	3 00
ROSE COMB DOMINIQUE.			
J. I. Myers.....	New Dover, O.....	Best cock.....	\$2 00
Julius Frank & Sons.....	Akron, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
Michener & Seas.....	Orrville, O.....	Best cockerel.....	2 00
J. I. Myers.....	New Dover, O.....	2d best cockerel.....	1 00
Chas. McClave.....	New London, O.....	3d best cockerel.....	50
J. L. Myers.....	New Dover, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Chas. McClave.....	New London, O.....	3d best hen.....	50
Michener & Seas.....	Orrville, O.....	Best pullet.....	2 00
J. I. Myers.....	New Dover, O.....	2d best pullet.....	1 00
Chas. McClave.....	New London, O.....	3d best pullet.....	50
Chas. McClave.....	New London, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount
S. C. RHODE ISLAND RED.			
O. E. Miles.....	Columbus, O.....	Best cock.....	\$2 00
Fred J. Mebs.....	Columbus, O.....	2d best cock.....	1 00
A. P. Lowry.....	Cambridge, O.....	3d best cock.....	50
Mrs. S. R. Light.....	McComb, O.....	Best cockerel.....	2 00
Geo. S. Moore.....	Clintonville, O.....	2d best cockerel.....	1 00
Wilson Bros.....	Springfield, O.....	3d best cockerel.....	50
O. E. Miles.....	Columbus, O.....	Best hen.....	2 00
College Hill Poultry Farm.....	Cincinnati, O.....	2d best hen.....	1 00
O. E. Miles.....	Columbus, O.....	3d best hen.....	50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
Geo. S. Moore.....	Clintonville, O.....	2d best pullet.....	1 00
Chas. McClave.....	New London, O.....	3d best pullet.....	50
O. E. Miles.....	Co'umbus, O.....	Best breeding pen.....	3 00
College Hill Poultry Farm.....	Cincinnati, O.....	2d best breeding pen.....	2 00
Mrs. S. R. Light.....	McComb, O.....	3d best breeding pen.....	1 00

ASIATIC CLASS—LIGHT BRAHMA.

F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cock.....	50
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
Chas. McClave.....	New London, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
Trout & Nusser.....	Fostoria, O.....	Best hen.....	2 00
C. W. Smith.....	Cardington, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Chas. McClave.....	New London, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best pullet.....	50
College Hill Poultry Farm.....	Cincinnati, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00
Trout & Nusser.....	Fostoria, O.....	3d best breeding pen.....	1 00

DARK BRAHMA.

F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cock.....	50
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
Chas. McClave.....	New London, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
Trout & Nusser.....	Fostoria, O.....	Best hen.....	2 00
C. W. Smith.....	Cardington, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Chas. McClave.....	New London, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best pullet.....	50
College Hill Poultry Farm.....	Cincinnati, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00
Trout & Nusser.....	Fostoria, O.....	3d best breeding pen.....	1 00

BUFF COCHIN.

Michener & Seas.....	Orrville, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
C. W. Smith.....	Cardington, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
C. W. Smith.....	Cardington, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Wilson & Chambers.....	Doylestown, O.....	Best pullet.....	2 00
C. W. Smith.....	Cardington, O.....	2d best pullet.....	1 00
C. W. Smith.....	Cardington, O.....	Best breeding pen.....	3 00

PARTRIDGE COCHIN.

C. W. Smith.....	Cardington, O.....	Best cock.....	\$2 00
Wilson & Chambers.....	Doylestown, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
C. W. Smith.....	Cardington, O.....	3d best cockerel.....	50
C. W. Smith.....	Cardington, O.....	Best hen.....	2 00
C. W. Smith.....	Cardington, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
C. W. Smith.....	Cardington, O.....	2d best pullet.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best pullet.....	50
C. W. Smith.....	Cardington, O.....	Best breeding pen.....	3 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
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WHITE COCHIN.

C. W. Smith	Cardington, O.	Best cock	\$2 00
Wilson & Chambers	Doylestown, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
C. W. Smith	Cardington, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	2d best cockerel	1 00
C. W. Smith	Cardington, O.	Best hen	2 00
C. W. Smith	Cardington, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
C. W. Smith	Cardington, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00
C. W. Smith	Cardington, O.	3d best pullet	50
C. W. Smith	Cardington, O.	Best breeding pen	3 00

BLACK COCHIN.

C. W. Smith	Cardington, O.	Best cock	\$2 00
C. W. Smith	Cardington, O.	2d best cock	1 00
C. W. Smith	Cardington, O.	3d best cock	50
Wilson Bros.	Springfield, O.	Best cockerel	2 00
P. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
C. W. Smith	Cardington, O.	3d best cockerel	50
C. W. Smith	Cardington, O.	Best hen	2 00
C. W. Smith	Cardington, O.	2d best hen	1 00
Wilson & Chambers	Doylestown, O.	3d best hen	50
C. W. Smith	Cardington, O.	Best pullet	2 00
P. H. Ricketts	Coshocton, O.	2d best pullet	1 00
C. W. Smith	Cardington, O.	Best breeding pen	3 00

BLACK LANGSHAN.

F. E. Corkwell	Newark, O.	Best cock	\$2 00
Trout & Nusser	Fostoria, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
Paul R. Scott	Clintonville, O.	Best cockerel	2 00
Trout & Nusser	Fostoria, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	3d best cockerel	50
Paul R. Scott	Clintonville, O.	Best hen	2 00
Chas. McClave	New London, O.	2d best hen	1 00
F. E. Corkwell	Newark, O.	3d best hen	50
M. M. Myers	Marysville, O.	Best pullet	2 00
Trout & Nusser	Fostoria, O.	2d best pullet	1 00
Trout & Nusser	Fostoria, O.	3d best pullet	50
Trout & Nusser	Fostoria, O.	Best breeding pen	3 00

WHITE LANGSHAN.

P. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Trout & Nusser	Fostoria, O.	2d best cock	1 00
Wilson & Chambers	Doylestown, O.	3d best cock	50
P. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Trout & Nusser	Fostoria, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	3d best cockerel	50
Trout & Nusser	Fostoria, O.	Best hen	2 00
Trout & Nusser	Fostoria, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Trout & Nusser	Fostoria, O.	Best pullet	2 00

MEDITERRANEAN CLASS—S. C. BROWN LEGHORN.

Bensch Bros.	Rocky Ridge, O.	Best cock	\$2 00
Bensch Bros.	Rocky Ridge, O.	2d best cock	1 00
Michener & Seas	Orrville, O.	3d best cock	50
Bensch Bros.	Rocky Ridge, O.	Best cockerel	2 00
Bensch Bros.	Rocky Ridge, O.	2d best cockerel	1 00
Michener & Seas	Orrville, O.	3d best cockerel	50
Benrch Bros.	Rocky Ridge, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
Michener & Seas	Orrville, O.	3d best hen	50
Bensch Bros.	Rocky Ridge, O.	Best pullet	2 00
Bensch Bros.	Rocky Ridge, O.	2d best pullet	1 00
F. H. Ricketts	Coshocton, O.	3d best pullet	50
Bensch Bros.	Rocky Ridge, O.	Best breeding pen	3 00
Michener & Seas	Orrville, O.	2d best breeding pen	2 00
M. M. Myers	Marysville, O.	3d best breeding pen	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
R. C. BROWN LEGHORN.			
P. H. Ricketts	Coshocton, O.	Best cock	\$2 00
E. T. Tetrick	Waverly, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
P. H. Ricketts	Coshocton, O.	Best cockerel	2 00
E. T. Tetrick	Waverly, O.	2d best cockerel	1 00
Michener & Seas	Orrville, O.	3d best cockerel	50
E. T. Tetrick	Waverly, O.	Best hen	2 00
E. T. Tetrick	Waverly, O.	2d best hen	1 00
P. H. Ricketts	Coshocton, O.	3d best hen	50
E. T. Tetrick	Waverly, O.	Best pullet	2 00
Michener & Seas	Orrville, O.	2d best pullet	1 00
E. T. Tetrick	Waverly, O.	3d best pullet	50
E. T. Tetrick	Waverly, O.	Best breeding pen	3 00
Michener & Seas	Orrville, O.	2d best breeding pen	2 00
S. C. WHITE LEGHORN.			
Carlisle Farm	Bellefontaine, O.	Best cock	\$2 00
G. B. Norris	Columbus, O.	2d best cock	1 00
W. R. Watts	Columbus, O.	Best cockerel	2 00
E. E. Eddy	Trimble, O.	2d best cockerel	1 00
Carlisle Farm	Bellefontaine, O.	3d best cockerel	50
College Hill Poultry Farm	Cincinnati, O.	Best hen	2 00
College Hill Poultry Farm	Cincinnati, O.	2d best hen	1 00
Hartman Stock Farm	Columbus, O.	3d best hen	50
E. E. Eddy	Trimble, O.	Best pullet	2 00
Carlisle Farm	Bellefontaine, O.	2d best pullet	1 00
Irvin S. Rarch	Columbiana, O.	3d best pullet	50
R. C. WHITE LEGHORN.			
L. H. Perry	Clay, N. Y.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Wilson & Chambers	Doylstown, O.	3d best cock	50
L. H. Perry	Clay, N. Y.	Best cockerel	2 00
Trout & Nusser	Fostoria, O.	2d best cockerel	1 00
P. H. Ricketts	Coshocton, O.	3d best cockerel	50
L. H. Perry	Clay, N. Y.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
M. M. Myers	Marysville, O.	3d best hen	50
Trout & Nusser	Fostoria, O.	Best pullet	2 00
P. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Wilson Bros.	Springfield, O.	3d best pullet	50
Chas. McClave	New London, O.	Best breeding pen	3 00
Trout & Nusser	Fostoria, O.	2d best breeding pen	2 00
Michener & Seas	Orrville, O.	3d best breeding pen	1 00
S. C. BLACK LEGHORN.			
Scott Long	Carey, O.	Best cock	\$2 00
Ralph Henderson	Marysville, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
J. I. Myers	New Dover, O.	Best cockerel	2 00
Scott Long	Carey, O.	2d best cockerel	1 00
Scott Long	Carey, O.	3d best cockerel	50
J. I. Myers	New Dover, O.	Best hen	2 00
Scott Long	Carey, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Scott Long	Carey, O.	Best pullet	2 00
Scott Long	Carey, O.	2d best pullet	1 00
P. H. Ricketts	Coshocton, O.	3d best pullet	50
J. I. Myers	New Dover, O.	Best breeding pen	3 00
Ralph Henderson	Marysville, O.	2d best breeding pen	2 00
Scott Long	Carey, O.	3d best breeding pen	1 00
S. C. BUFF LEGHORN.			
College Hill Poultry Farm	Cincinnati, O.	Best cock	\$2 00
Michener & Seas	Orrville, O.	2d best cock	1 00
P. H. Ricketts	Coshocton, O.	3d best cock	50
P. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Walter E. Heighson	Clay, N. Y.	2d best cockerel	1 00
Trout & Nusser	Fostoria, O.	3d best cockerel	50
College Hill Poultry Farm	Cincinnati, O.	Best hen	2 00
Trout & Nusser	Fostoria, O.	2d best hen	1 00
Robert C. Rounds	Gorham, Me.	3d best hen	50
Michener & Seas	Orrville, O.	Best pullet	2 00
P. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Walter E. Heighson	Clay, N. Y.	3d best pullet	50
College Hill Poultry Farm	Cincinnati, O.	Best breeding pen	3 00
Michener & Seas	Orrville, O.	2d best breeding pen	2 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
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ROSE COMB BUFF LEGHORN.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Michener & Seas	Orrville, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	3d best cockerel	50
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	Best pullet	2 00
Michener & Seas	Orrville, O.	2d best pullet	1 00
F. H. Ricketts	Coshocton, O.	3d best pullet	50

SILVER LEGHORN.

Wilson Bros.	Springfield, O.	Best cock	\$2 00
Julius Frank & Son	Akron, O.	2d best cock	1 00
F. H. Ricketts	Coshocton, O.	3d best cock	50
Trout & Nusser	Postoria, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	3d best cockerel	50
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
Trout & Nusser	Postoria, O.	3d best hen	50
Michener & Seas	Orrville, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Wilson Bros.	Springfield, O.	3d best pullet	50

S. C. BLACK MINORCA.

Chas. W. Helman	Waverly, O.	Best cock	\$2 00
O. K. Brown	Ashland, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
Chas. W. Helman	Waverly, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	3d best cockerel	50
O. K. Brown	Ashland, O.	Best hen	2 00
Chas. W. Helman	Waverly, O.	2d best hen	1 00
Chas. McClave	New London, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00
Chas. W. Helman	Waverly, O.	2d best pullet	1 00
F. H. Ricketts	Coshocton, O.	3d best pullet	50
Chas. W. Helman	Waverly, O.	Best breeding pen	3 00
Chas. McClave	New London, O.	2d best breeding pen	2 00

R. C. BLACK MINORCA.

Michener & Seas	Orrville, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Michener & Seas	Orrville, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
Wilson & Chambers	Doylestown, O.	3d best cockerel	50
Wilson & Chambers	Doylestown, O.	Best hen	2 00
Trout & Nusser	Postoria, O.	2d best hen	1 00
Michener & Seas	Orrville, O.	3d best hen	50
Michener & Seas	Orrville, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Wilson Bros.	Springfield, O.	3d best pullet	50
Michener & Seas	Orrville, O.	Best breeding pen	3 00

WHITE MINORCA.

C. S. Anglemyer	Leetonia, O.	Best cock	\$2 00
C. S. Anglemyer	Leetonia, O.	2d best cock	1 00
Wilson & Chambers	Doylestown, O.	3d best cock	50
C. S. Anglemyer	Leetonia, O.	Best cockerel	2 00
C. S. Anglemyer	Leetonia, O.	2d best cockerel	1 00
Michener & Seas	Orrville, O.	3d best cockerel	50
Michener & Seas	Orrville, O.	Best hen	2 00
Trout & Nusser	Postoria, O.	2d best hen	1 00
J. I. Myers	New Dover, O.	3d best hen	50
C. S. Anglemyer	Leetonia, O.	Best pullet	2 00
C. S. Anglemyer	Leetonia, O.	2d best pullet	1 00
Wilson & Chambers	Doylestown, O.	3d best pullet	50
C. S. Anglemyer	Leetonia, O.	Best breeding pen	3 00
Michener & Seas	Orrville, O.	2d best breeding pen	2 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
BLUE ANDALUSIAN.			
Hartman Stock Farm.....	Columbus, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Postoria, O.....	Best hen.....	2 00
Hartman Stock Farm.....	Columbus, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
Hartman Stock Farm.....	Columbus, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00

WHITE FACED BLACK SPANISH.

Henry Leshey.....	Columbus, O.....	Best cock.....	\$2 00
Michener & Seas.....	Orrville, O.....	2d best cock.....	1 00
Wilson Bros.....	Springfield, O.....	3d best cock.....	50
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
Henry Leshey.....	Columbus, O.....	Best hen.....	2 00
Henry Leshey.....	Columbus, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00

ANCONA.

Wilson & Chambers.....	Doylestown, O.....	Best cock.....	\$2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
Frank C. Stier.....	Cleveland, O.....	3d best cock.....	50
Frank C. Stier.....	Cleveland, O.....	Best cockerel.....	2 00
Frank C. Stier.....	Cleveland, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best cockerel.....	50
Frank C. Stier.....	Cleveland, O.....	Best hen.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00
Chas. McClave.....	New London, O.....	2d best pullet.....	1 00
Michener & Seas.....	Orrville, O.....	3d best pullet.....	50
Frank C. Stier.....	Cleveland, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00
Chas. McClave.....	New London, O.....	3d best breeding pen.....	1 00

CAMPINE.

Wilson & Chambers.....	Doylestown, O.....	Best cock.....	\$2 00
M. B. Shaw.....	Cardington, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cock.....	50
M. B. Shaw.....	Cardington, O.....	Best cockerel.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best cockerel.....	1 00
M. B. Shaw.....	Cardington, O.....	3d best cockerel.....	50
M. B. Shaw.....	Cardington, O.....	Best hen.....	2 00
Michener & Seas.....	Orrville, O.....	2d best hen.....	1 00
Mrs. C. E. Cram.....	Carey, O.....	3d best hen.....	50
M. B. Shaw.....	Cardington, O.....	Best pullet.....	2 00
M. B. Shaw.....	Cardington, O.....	2d best pullet.....	1 00
Mrs. C. E. Cram.....	Carey, O.....	3d best pullet.....	50

ENGLISH CLASS—WHITE ORPINGTON

A. M. Ramey.....	Trimble, O.....	Best cock.....	\$2 00
Mrs. S. T. Budd.....	Clintonville, O.....	2d best cock.....	1 00
Mrs. S. T. Budd.....	Clintonville, O.....	3d best cock.....	50
Mrs. S. T. Budd.....	Clintonville, O.....	Best cockerel.....	2 00
J. F. & I. Alexander.....	Columbus, O.....	2d best cockerel.....	1 00
Mrs. S. T. Budd.....	Clintonville, O.....	3d best cockerel.....	50
Bellefontaine White Orpington Yds	Bellefontaine, O.....	Best hen.....	2 00
Bellefontaine White Orpington Yds	Bellefontaine, O.....	2d best hen.....	1 00
A. M. Ramey.....	Trimble, O.....	3d best hen.....	50
Bellefontaine White Orpington Yds	Bellefontaine, O.....	Best pullet.....	2 00
C. L. Pease.....	Columbus, O.....	2d best pullet.....	1 00
Geo. K. Wright.....	Ashville, O.....	3d best pullet.....	50
Michener & Seas.....	Orrville, O.....	Best breeding pen.....	3 00
Mrs. S. T. Budd.....	Clintonville, O.....	2d best breeding pen.....	2 00
J. L. Stephenson.....	Jacksonville, O.....	3d best breeding pen.....	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
BLACK ORPINGTON.			
Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
Wilson & Chambers.....	Doylestown, O.....	2d best cock.....	1 00
S. P. McCabe.....	Columbus, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
Chas. McClave.....	New London, O.....	2d best cockerel.....	1 00
A. L. Stout.....	Mansfield, O.....	3d best cockerel.....	50
E. C. Vesey & Son.....	Painesville, O.....	Best hen.....	2 00
Michener & Seas.....	Orrville, O.....	2d best hen.....	1 00
P. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
A. L. Stout.....	Mansfield, O.....	Best pullet.....	2 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	1 00
A. L. Stout.....	Mansfield, O.....	3d best pullet.....	50
Wilson & Chambers.....	Doylestown, O.....	Best breeding pen.....	3 00
A. H. Leaman.....	Columbus, O.....	2d best breeding pen.....	2 00
E. C. Vesey & Son.....	Painesville, O.....	3d best breeding pen.....	1 00
BUFF ORPINGTON.			
C. N. Darst.....	Jacksonville, O.....	Best cock.....	\$2 00
C. N. Darst.....	Jacksonville, O.....	2d best cock.....	1 00
B. H. Calkins.....	Salem, O.....	3d best cock.....	50
McClave & Ringler.....	Rochester, O.....	Best cockerel.....	2 00
Dr. J. E. Studebaker.....	Springfield, O.....	2d best cockerel.....	1 00
Dr. J. E. Studebaker.....	Springfield, O.....	3d best cockerel.....	50
Dr. J. E. Studebaker.....	Springfield, O.....	Best hen.....	2 00
C. N. Darst.....	Jacksonville, O.....	2d best hen.....	1 00
C. N. Darst.....	Jacksonville, O.....	3d best hen.....	50
E. C. Vesey & Son.....	Painesville, O.....	Best pullet.....	2 00
McClave & Ringler.....	Rochester, O.....	2d best pullet.....	1 00
Dr. J. E. Studebaker.....	Springfield, O.....	3d best pullet.....	50
C. N. Darst.....	Jacksonville, O.....	Best breeding pen.....	3 00
McClave & Ringler.....	Rochester, O.....	2d best breeding pen.....	2 00
Mrs. Bertha Hilt.....	Jacksonville, O.....	3d best breeding pen.....	1 00
RED CAP.			
Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Fostoria, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
C. S. Rice.....	Spencer, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Fostoria, O.....	2d best cockerel.....	1 00
C. S. Rice.....	Spencer, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	2d best hen.....	1 00
M. M. Myers.....	Marysville, O.....	3d best hen.....	50
C. S. Rice.....	Spencer, O.....	Best pullet.....	2 00
Chas. McClave.....	New London, O.....	2d best pullet.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best pullet.....	50
C. S. Rice.....	Spencer, O.....	Best breeding pen.....	3 00
Chas. McClave.....	New London, O.....	2d best breeding pen.....	2 00
WHITE DORKING.			
P. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best Cockerel.....	2 00
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
P. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
SILVER GRAY DORKING.			
Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
Michener & Seas.....	Orrville, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best cockerel.....	50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
M. M. Myers.....	Marysville, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Julius Frank & Son.....	Akron, O.....	Best pullet.....	2 00
Michener & Seas.....	Orrville, O.....	2d best pullet.....	1 00
Julius Frank & Son.....	Akron, O.....	Best breeding pen.....	3 00
COLOR DORKING.			
Julius Frank & Son.....	Akron, O.....	Best cock.....	\$2 00
P. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
Wilson Bros.....	Springfield, O.....	3d best cock.....	50
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
P. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
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HAMBURG CLASS—GOLDEN SPANGLED HAMBURG.

Julius Frank & Son.....	Akron, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best cockerel.....	1 00
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00

SILVER SPANGLED HAMBURG.

Julius Frank & Son.....	Akron, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
M. M. Myers.....	Marysville, O.....	3d best cock.....	50
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best cockerel.....	50
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	2d best hen.....	1 00
Michener & Seas.....	Orrville, O.....	3d best hen.....	50
Julius Frank & Son.....	Akron, O.....	Best pullet.....	2 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best pullet.....	50
Julius Frank & Son.....	Akron, O.....	Best breeding pen.....	3 00
Michener & Seas.....	Orrville, O.....	2d best breeding pen.....	2 00

GOLDEN PENCILED HAMBURG.

Michener & Seas.....	Orrville, O.....	Best cock.....	\$2 00
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
Julius Frank & Son.....	Best hen.....	Best hen.....	2 00
Michener & Seas.....	Orrville, O.....	2d best hen.....	1 00
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50

SILVER PENCILED HAMBURG.

Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
Julius Frank & Son.....	Akron, O.....	Best pullet.....	2 00
Julius Frank & Son.....	Akron, O.....	Best breeding pen.....	3 00

BLACK HAMBURG.

Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best cock.....	50
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	\$2 00
Trout & Nusser.....	Postoria, O.....	2d best cockerel.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cockerel.....	50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00
Michener & Seas.....	Orrville, O.....	2d best pullet.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best pullet.....	50
Julius Frank & Son.....	Akron, O.....	Best breeding pen.....	3 00

WHITE HAMBURG.

Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Postoria, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Postoria, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Wilson Bros.....	Springfield, O.....	Best pullet.....	1 00
Julius Frank & Son.....	Akron, O.....	2d best pullet.....	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
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POLISH CLASS—W. C. BLACK POLISH.

Wilson Bros	Springfield, O.	Best cock	\$2 00
Trout & Nusser	Postoria, O.	2d best cock	1 00
Chas. McClave	New London, O.	3d best cock	50
Michener & Seas	Orrville, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	2d best cockerel	1 00
Julius Frank & Son	Akron, O.	Best hen	2 00
Trout & Nusser	Postoria, O.	2d best hen	1 00
Wilson Bros	Springfield, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00

BEARDED SILVER POLISH.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros	Springfield, O.	2d best cock	1 00
Michener & Seas	Springfield, O.	3d best cock	50
Julius Frank & Son	Akron, O.	Best hen	2 00
Wilson Bros	Springfield, O.	2d best hen	1 00
Trout & Nusser	Postoria, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00

NON-BEARDED SILVER POLISH.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros	Springfield, O.	2d best cock	1 00
Julius Frank & Son	Akron, O.	3d best cock	50
Trout & Nusser	Postoria, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
Julius Frank & Son	Akron, O.	3d best cockerel	50
Julius Frank & Son	Akron, O.	Best hen	2 00
Wilson Bros	Springfield, O.	2d best hen	1 00
Michener & Seas	Orrville, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00
Trout & Nusser	Postoria, O.	2d best pullet	1 00
F. H. Ricketts	Coshocton, O.	3d best pullet	50

BEARDED GOLDEN POLISH.

Julius Frank & Son	Akron, O.	Best cock	\$2 00
Wilson Bros	Springfield, O.	2d best cock	1 00
F. H. Ricketts	Coshocton, O.	3d best cock	50
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	Best hen	2 00
Julius Frank & Son	Akron, O.	2d best hen	1 00
Michener & Seas	Orrville, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
Trout & Nusser	Postoria, O.	2d best pullet	1 00

NON-BEARDED GOLDEN POLISH.

Wilson Bros	Springfield, O.	Best cock	\$2 00
Trout & Nusser	Postoria, O.	2d best cock	1 00
Julius Frank & Son	Akron, O.	3d best cock	50
Trout & Nusser	Postoria, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	2d best cockerel	1 00
Julius Frank & Son	Akron, O.	3d best cockerel	50
Julius Frank & Son	Akron, O.	Best hen	2 00
Michener & Seas	Orrville, O.	2d best hen	1 00
Trout & Nusser	Postoria, O.	Best pullet	2 00
Trout & Nusser	Postoria, O.	2d best pullet	1 00
Wilson Bros	Springfield, O.	3d best pullet	50

BEARDED WHITE POLISH.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Trout & Nusser	Postoria, O.	2d best cock	1 00
Wilson Bros	Springfield, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	Best hen	2 00
Wilson Bros	Springfield, O.	Best pullet	2 00

NON-BEARDED WHITE POLISH.

Wilson Bros	Springfield, O.	Best cock	\$2 00
Julius Frank & Son	Akron, O.	2d best cock	1 00
Michener & Seas	Orrville, O.	3d best cock	50
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Julius Frank & Son	Akron, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
Michener & Seas	Orrville, O.	2d best pullet	1 00

POULTRY — Continued.

Name.	Postoffice.	Awards.	Amount.
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BUFF LACED POLISH.

Wilson Bros.	Springfield, O.	Best cock	\$2 00
Michener & Seas	Orrville, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
M. M. Myers	Marysville, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00

FRENCH CLASS—MOTTLED HOUDAN.

Wilson Bros.	Springfield, O.	Best cock	\$2 00
Trout & Nusser	Postoria, O.	2d best cock	1 00
F. H. Ricketts	Coshocton, O.	3d best cock	50
Trout & Nusser	Postoria, O.	Best cockerel	2 00
Chas. McClave	New London, O.	2d best cockerel	1 00
Julius Frank & Son	Akron, O.	3d best cockerel	50
Chas. McClave	New London, O.	Best hen	2 00
Trout & Nusser	Postoria, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Trout & Nusser	Postoria, O.	Best pullet	2 00
Chas. McClave	New London, O.	2d best pullet	1 00
Julius Frank & Son	Akron, O.	3d best pullet	50
Michener & Seas	Orrville, O.	Best breeding pen	3 00

BLACK CREVECOEUR.

Wilson Bros.	Springfield, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00

BLACK LA FLECHE.

Julius Frank & Son	Akron, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
Wilson Bros.	Springfield, O.	Best cockerel	2 00
Julius Frank & Son	Akron, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	Best hen	2 00
Julius Frank & Son	Akron, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	3d best hen	50
Julius Frank & Son	Akron, O.	Best pullet	2 00

GAMES AND BANTAM CLASS—BLACK—BREASTED RED GAME.

Chas. McClave	New London, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	Best hen	2 00
Chas. McClave	New London, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00

BROWN RED GAME.

Wilson Bros.	Springfield, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00

GOLDEN DUCKWING GAME.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00

SILVER DUCKWING GAME.

F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Chas. McClave	New London, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Wilson Bros.	Springfield, O.	Best pullet	2 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount
BIRCHEN GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
J. I. Myers	New Dover, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
RED PYLE GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Chas. McClave	New London, O.	3d best cock	50
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
Chas. McClave	New London, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
WHITE GAME BANTAM.			
Wilson Bros.	Springfield, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	2d best cock	1 00
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
BLACK GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Chas. McClave	New London, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
BLACK BREASTED RED GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Model Poultry Farm	Springfield, O.	3d best cock	50
Model Poultry Farm	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00
Model Poultry Farm	Springfield, O.	3d best pullet	50
BROWN RED GAME BANTAM.			
M. M. Myers	Marysville, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Chas. McClave	New London, O.	3d best cock	50
Wilson Bros.	Springfield, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00
GOLDEN DUCKWING BANTAM.			
Wilson Bros.	Springfield, O.	Best cock	\$2 00
Trout & Nusser	Festoria, O.	2d best cock	1 00
Model Poultry Farm	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
Trout & Nusser	Festoria, O.	3d best hen	50
Model Poultry Farm	Springfield, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00
SILVER DUCKWING GAME BANTAM.			
Wilson Bros.	Springfield, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	2d best cock	1 00
Model Poultry Farm	Springfield, O.	3d best cock	50
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Model Poultry Farm	Springfield, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
F. H. Ricketts	Coshocton, O.	3d best hen	50
F. H. Ricketts	Coshocton, O.	Best pullet	2 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
BIRCHEN GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
Wilson Bros.	Springfield, O.	3d best hen	50
Wilson Bros.	Springfield, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Wilson Bros.	Springfield, O.	3d best pullet	50
RED PYLE GAME BANTAM.			
Wilson Bros.	Springfield, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	2d best cock	1 00
Trout & Nusser	Postoria, O.	Best cockerel	2 00
Model Poultry Farm	Springfield, O.	2d best cockerel	1 00
Wilson Bros.	Springfield, O.	3d best cockerel	50
Wilson Bros.	Springfield, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
Model Poultry Farm	Springfield, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00
Trout & Nusser	Postoria, O.	3d best pullet	50
WHITE GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00
Wilson Bros.	Springfield, O.	3d best pullet	50
BLACK GAME BANTAM.			
F. H. Ricketts	Coshocton, O.	Best cock	\$2 00
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
F. H. Ricketts	Coshocton, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	Best pullet	2 00
ORIENTAL CLASS—DARK CORNISH (INDIAN GAME).			
Wilson Bros.	Springfield, O.	Best cock	\$2 00
Trout & Nusser	Postoria, O.	2d best cock	1 00
Michener & Seas	Orrville, O.	3d best cock	50
Hartman Stock Farm	Columbus, O.	Best cockerel	2 00
Trout & Nusser	Postoria, O.	Best hen	2 00
Trout & Nusser	Postoria, O.	2d best hen	1 00
Hartman Stock Farm	Columbus, O.	3d best hen	50
Hartman Stock Farm	Columbus, O.	Best pullet	2 00
Wilson Bros.	Springfield, O.	2d best pullet	1 00
Trout & Nusser	Postoria, O.	3d best pullet	50
WHITE CORNISH (INDIAN GAME.)			
L. G. Carey	Trimble, O.	Best cock	\$2 00
L. G. Carey	Trimble, O.	2d best cock	1 00
Wilson Bros.	Springfield, O.	3d best cock	50
L. G. Carey	Trimble, O.	Best cockerel	2 00
L. G. Carey	Trimble, O.	2d best cockerel	1 00
F. H. Ricketts	Coshocton, O.	3d best cockerel	50
L. G. Carey	Trimble, O.	Best hen	2 00
Wilson Bros.	Springfield, O.	2d best hen	1 00
M. M. Myers	Marysville, O.	3d best hen	50
L. G. Carey	Trimble, O.	Best pullet	2 00
L. G. Carey	Trimble, O.	2d best pullet	1 00
F. H. Ricketts	Coshocton, O.	3d best pullet	50
BLACK SUMATRA.			
Chas. McClave	New London, O.	Best cock	\$2 00
Wilson Bros.	Springfield, O.	2d best cock	1 00
Trout & Nusser	Postoria, O.	3d best cock	50
F. H. Ricketts	Coshocton, O.	Best cockerel	2 00
Wilson Bros.	Springfield, O.	Best hen	2 00
F. H. Ricketts	Coshocton, O.	2d best hen	1 00
Michener & Seas	Orrville, O.	3d best hen	50
M. M. Myers	Marysville, O.	Best pullet	2 00
F. H. Ricketts	Coshocton, O.	2d best pullet	1 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
BLACK BREASTED RED MALAY.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
ORIENTAL BANTAM CLASS—GOLDEN SEBRIGHT BANTAM.			
Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best cock.....	50
Trout & Nusser.....	Postoria, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best cockerel.....	50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Julius Frank & Son.....	Akron, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
SILVER SEBRIGHT BANTAM.			
Trout & Nusser.....	Postoria, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Trout & Nusser.....	Postoria, O.....	Best cockerel.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best cockerel.....	1 00
Wilson Bros.....	Springfield, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Trout & Nusser.....	Postoria, O.....	Best pullet.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best pullet.....	1 00
WHITE ROSE COMB BANTAM.			
Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	3d best cock.....	50
Chas. McClave.....	New London, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
Wilson Bros.....	Springfield, O.....	3d best cockerel.....	50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best hen.....	1 00
L. G. Carey.....	Trimble, O.....	3d best hen.....	50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
Chas. McClave.....	New London, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
BLACK ROSE COMB.			
Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
Trout & Nusser.....	Postoria, O.....	Best cockerel.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best cockerel.....	1 00
Chas. McClave.....	New London, O.....	3d best cockerel.....	50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
Chas. McClave.....	New London, O.....	Best pullet.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best pullet.....	1 00
Moxie Poultry Farm.....	Springfield, O.....	3d best pullet.....	50
WHITE BOOTED BANTAM.			
Wilson Bros.....	Springfield, O.....	Best cock.....	\$2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Wilson Bros.....	Springfield, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	1 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
LIGHT BRAHMA BANTAM.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Fostoria, O.....	2d best cock.....	1 00
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
Michener & Seas.....	Orrville, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cockerel.....	50
Trout & Nusser.....	Fostoria, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best hen.....	50
Michener & Seas.....	Orrville, O.....	Best pullet.....	2 00
Trout & Nusser.....	Fostoria, O.....	2d best pullet.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best pullet.....	50
DARK BRAHMA BANTAM.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Julius Frank & Son.....	Akron, O.....	2d best cock.....	1 00
Michener & Seas.....	Orrville, O.....	3d best cock.....	50
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
F. H. Ricketts.....	Coshocton, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
BUFF COCHIN BANTAM.			
M. M. Myers.....	Marysville, O.....	Best cock.....	\$2 00
Julius Frank & Son.....	Akron, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
F. H. Ricketts.....	Coshocton, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	3d best hen.....	50
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
Trout & Nusser.....	Fostoria, O.....	2d best pullet.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best pullet.....	50
PARTRIDGE COCHIN BANTAM.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	2 00
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	1 00
Model Poultry Farm.....	Springfield, O.....	2d best cockerel.....	50
Michener & Seas.....	Orrville, O.....	3d best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	2 00
Model Poultry Farm.....	Springfield, O.....	Best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	50
WHITE COCHIN BANTAM.			
F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Michener & Seas.....	Orrville, O.....	2d best cock.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best cock.....	50
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best cockerel.....	1 00
M. M. Myers.....	Marysville, O.....	3d best cockerel.....	50
Wilson Bros.....	Springfield, O.....	Best hen.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50
BLACK COCHIN BANTAM.			
Wilson & Chambers.....	Doylestown, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best cock.....	50
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
Model Poultry Farm.....	Springfield, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
Chas. McClave.....	New London, O.....	Best hen.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best hen.....	1 00
Wilson & Chambers.....	Doylestown, O.....	3d best hen.....	50
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00
Wilson Bros.....	Springfield, O.....	2d best pullet.....	1 00
Chas. McClave.....	New London, O.....	3d best pullet.....	50

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
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BLACK TAILED JAPANESE BANTAM.

F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Model Poultry Farm.....	Springfield, O.....	2d best cock.....	1 00
Wilson Bros.....	Springfield, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
Model Poultry Farm.....	Springfield, O.....	3d best cockerel.....	50
Wilson Bros.....	Springfield, O.....	Best hen.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best hen.....	1 00
Wilson Bros.....	Springfield, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00
Model Poultry Farm.....	Springfield, O.....	3d best pullet.....	50

BEARDED WHITE POLISH BANTAM.

Julius Frank & Son.....	Akron, O.....	Best cock.....	\$2 00
Wilson Bros.....	Springfield, O.....	2d best cock.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best cock.....	50
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
Wilson Bros.....	Springfield, O.....	2d best cockerel.....	1 00
Trout & Nusser.....	Fostoria, O.....	3d best cockerel.....	50
Julius Frank & Son.....	Akron, O.....	Best hen.....	2 00
Wilson Bros.....	Springfield, O.....	2d best hen.....	1 00
F. H. Ricketts.....	Coshocton, O.....	3d best hen.....	50
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best pullet.....	1 00
Wilson Bros.....	Springfield, O.....	3d best pullet.....	50

BUFF LACED POLISH BANTAM.

F. H. Ricketts.....	Coshocton, O.....	Best cock.....	\$2 00
Julius Frank & Son.....	Akron, O.....	Best cockerel.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best cockerel.....	1 00
F. H. Ricketts.....	Coshocton, O.....	Best hen.....	2 00
Julius Frank & Son.....	Akron, O.....	Best pullet.....	2 00
F. H. Ricketts.....	Coshocton, O.....	2d best pullet.....	1 00

TURKEYS.

Name.	Postoffice.	Awards.	Amount.
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ADULT OR YEARLING BRONZE.

M. M. Myers.....	Marysville, O.....	Best cock.....	\$2 00
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ADULT OR YEARLING NARRAGANSETT.

Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
Chas. McClave.....	New London, O.....	Best hen.....	2 00

WHITE HOLLAND.

Trout & Nusser.....	Fostoria, O.....	Best cock.....	\$2 00
Trout & Nusser.....	Fostoria, O.....	Best cockerel.....	2 00
Trout & Nusser.....	Fostoria, O.....	Best hen.....	2 00
Trout & Nusser.....	Fostoria, O.....	Best pullet.....	2 00

BLACK.

Chas. McClave.....	New London, O.....	Best cock.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best cock.....	1 00
Chas. McClave.....	New London, O.....	Best hen.....	2 00
M. M. Myers.....	Marysville, O.....	2d best hen.....	1 00

BUFF.

Dysart Bros.....	Belmont, O.....	Best cock.....	\$2 00
Chas. McClave.....	New London, O.....	2d best cock.....	1 00
Dysart Bros.....	Belmont, O.....	Best cockerel.....	2 00
Dysart Bros.....	Belmont, O.....	Best hen.....	2 00
Chas. McClave.....	New London, O.....	2d best hen.....	1 00
Dysart Bros.....	Belmont, O.....	Best pullet.....	2 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
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SLATE.

M. M. Myers	Marysville, O.	Best cock	\$2 00
Chas. McClave	New London, O.	2d best cock	1 00
M. M. Myers	Marysville, O.	Best cockerel	2 00
Chas. McClave	New London, O.	Best hen	2 00
M. M. Myers	Marysville, O.	2d best hen	1 00
J. I. Myers	New Dover, O.	3d best hen	50
Chas. McClave	New London, O.	Best pullet	2 00

BOURBON RED.

Chas. McClave	New London, O.	Best cock	\$2 00
M. M. Myers	Marysville, O.	2d best cock	1 00
Dysart Bros.	Belmont, O.	3d best cock	50
Dysart Bros.	Belmont, O.	Best cockerel	2 00
Chas. McClave	New London, O.	Best hen	2 00
M. M. Myers	Marysville, O.	2d best hen	1 00
Dysart Bros.	Belmont, O.	3d best hen	50
Dysart Bros.	Belmont, O.	Best pullet	2 00

DUCKS.

Name.	Postoffice.	Awards.	Amount.
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WHITE PEKIN.

M. M. Myers	Marysville, O.	Best adult drake	\$2 00
Chas. McClave	New London, O.	2d best adult drake	1 00
Trout & Nusser	Postoria, O.	3d best adult drake	50
Chas. McClave	New London, O.	Best young drake	2 00
Trout & Nusser	Postoria, O.	2d best young drake	1 00
Trout & Nusser	Postoria, O.	Best adult duck	2 00
M. M. Myers	Marysville, O.	2d best adult duck	1 00
Chas. McClave	New London, O.	3d best adult duck	50
Trout & Nusser	Postoria, O.	Best young duck	2 00
M. M. Myers	Marysville, O.	2d best young duck	1 00

AYLESBURY.

Chas. McClave	New London, O.	Best adult drake	\$2 00
Wilson Bros.	Springfield, O.	2d best adult drake	1 00
Chas. McClave	New London, O.	Best adult duck	2 00

COLORED ROUEN.

Trout & Nusser	Postoria, O.	Best adult drake	\$2 00
M. M. Myers	Marysville, O.	2d best adult drake	1 00
Chas. McClave	New London, O.	3d best adult drake	50
M. M. Myers	Marysville, O.	Best young drake	2 00
Chas. McClave	New London, O.	Best adult duck	2 00
M. M. Myers	Marysville, O.	2d best adult duck	1 00
Trout & Nusser	Postoria, O.	3d best adult duck	50
Wilson Bros.	Springfield, O.	Best young duck	2 00
Trout & Nusser	Postoria, O.	2d best young duck	1 00
M. M. Myers	Marysville, O.	3d best young duck	50

BLACK CAYUGA.

Wilson Bros.	Springfield, O.	Best adult drake	\$2 00
M. M. Myers	Marysville, O.	2d best adult drake	1 00
Trout & Nusser	Postoria, O.	3d best adult drake	50
Trout & Nusser	Postoria, O.	Best young drake	2 00
Wilson Bros.	Springfield, O.	2d best young drake	1 00
M. M. Myers	Marysville, O.	3d best young drake	50
M. M. Myers	Marysville, O.	Best adult duck	2 00
Wilson Bros.	Springfield, O.	2d best adult duck	1 00
Chas. McClave	New London, O.	3d best adult duck	50
Wilson Bros.	Springfield, O.	Best young duck	2 00
Trout & Nusser	Postoria, O.	2d best young duck	1 00
M. M. Myers	Marysville, O.	3d best young duck	50

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
GRAY CALL.			
Chas. McClave.....	New London, O.....	Best adult drake.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best adult drake.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best adult drake.....	50
M. M. Myers.....	Marysville, O.....	Best young drake.....	2 00
M. M. Myers.....	Marysville, O.....	Best adult duck.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best adult duck.....	1 00
Chas. McClave.....	New London, O.....	3d best adult duck.....	50
Chas. McClave.....	New London, O.....	Best young duck.....	2 00
M. M. Myers.....	Marysville, O.....	2d best young duck.....	1 00
WHITE CALL.			
M. M. Myers.....	Marysville, O.....	Best adult drake.....	\$2 00
Chas. McClave.....	New London, O.....	2d best adult drake.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best adult drake.....	50
Wilson Bros.....	Springfield, O.....	Best young drake.....	2 00
M. M. Myers.....	Marysville, O.....	2d best young drake.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best young drake.....	50
M. M. Myers.....	Marysville, O.....	Best adult duck.....	2 00
M. M. Myers.....	Marysville, O.....	2d best adult duck.....	1 00
Julius Frank & Son.....	Akron, O.....	3d best adult duck.....	50
Julius Frank & Son.....	Akron, O.....	Best young duck.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best young duck.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best young duck.....	50
BLACK EAST INDIA.			
Trout & Nusser.....	Postoria, O.....	Best adult drake.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best adult drake.....	1 00
Wilson Bros.....	Springfield, O.....	3d best adult drake.....	50
Trout & Nusser.....	Postoria, O.....	Best young drake.....	2 00
M. M. Myers.....	Marysville, O.....	2d best young drake.....	1 00
Trout & Nusser.....	Postoria, O.....	Best adult duck.....	2 00
Chas. McClave.....	New London, O.....	2d best adult duck.....	1 00
M. M. Myers.....	Marysville, O.....	3d best adult duck.....	50
M. M. Myers.....	Marysville, O.....	Best young duck.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best young duck.....	1 00
WHITE CRESTED.			
Wilson & Chambers.....	Doylestown, O.....	Best adult drake.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best adult drake.....	1 00
Chas. McClave.....	New London, O.....	3d best adult drake.....	50
Wilson & Chambers.....	Doylestown, O.....	Best young drake.....	2 00
M. M. Myers.....	Marysville, O.....	Best adult duck.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best adult duck.....	1 00
Chas. McClave.....	New London, O.....	3d best adult duck.....	50
Trout & Nusser.....	Postoria, O.....	Best young duck.....	2 00
Wilson & Chambers.....	Doylestown, O.....	2d best young duck.....	1 00
COLORED MUSCOVY.			
J. I. Myers.....	New Dover, O.....	Best adult drake.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best adult drake.....	1 00
Chas. McClave.....	New London, O.....	3d best adult drake.....	50
Wilson Bros.....	Springfield, O.....	Best young drake.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best young drake.....	1 00
Trout & Nusser.....	Postoria, O.....	3d best young drake.....	50
M. M. Myers.....	Marysville, O.....	Best adult duck.....	2 00
Chas. McClave.....	New London, O.....	2d best adult duck.....	1 00
M. M. Myers.....	Marysville, O.....	3d best adult duck.....	50
Wilson Bros.....	Springfield, O.....	Best young duck.....	2 00
Julius Frank & Son.....	Akron, O.....	2d best young duck.....	1 00
Chas. McClave.....	New London, O.....	3d best young duck.....	50
WHITE MUSCOVY.			
Wilson Bros.....	Springfield, O.....	Best adult drake.....	\$2 00
M. M. Myers.....	Marysville, O.....	2d best adult drake.....	1 00
Chas. McClave.....	New London, O.....	3d best adult drake.....	50
M. M. Myers.....	Marysville, O.....	Best young drake.....	2 00
Chas. McClave.....	New London, O.....	2d best young drake.....	1 00
Chas. McClave.....	New London, O.....	Best adult duck.....	2 00
Trout & Nusser.....	Postoria, O.....	2d best adult duck.....	1 00
M. M. Myers.....	Marysville, O.....	3d best adult duck.....	50
M. M. Myers.....	Marysville, O.....	Best young duck.....	2 00
Chas. McClave.....	New London, O.....	2d best young duck.....	1 00

POULTRY—Continued.

Name.	Postoffice.	Awards.	Amount.
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INDIAN RUNNER.

Chas. McClave	New London, O.	Best adult drake	\$2 00
M. M. Myers	Marysville, O.	2d best adult drake	1 00
Trout & Nusser	Postoria, O.	3d best adult drake	50
M. M. Myers	Marysville, O.	Best young drake	2 00
Chas. McClave	New London, O.	2d best young drake	1 00
Trout & Nusser	Postoria, O.	3d best young drake	50
L. G. Cary	Trimble, O.	Best adult duck	2 00
Wilson & Chambers	Doylestown, O.	2d best adult duck	1 00
M. M. Myers	Marysville, O.	3d best adult duck	50
M. M. Myers	Marysville, O.	Best young duck	2 00
Chas. McClave	New London, O.	2d best young duck	1 00
Trout & Nusser	Postoria, O.	3d best young duck	50

BLUE SWEDISH.

M. M. Myers	Marysville, O.	Best adult drake	\$2 00
Chas. McClave	New London, O.	2d best adult drake	1 00
Chas. McClave	New London, O.	Best young drake	2 00
J. I. Myers	New Dover, O.	2d best young drake	1 00
Chas. McClave	New London, O.	Best adult duck	2 00
M. M. Myers	Marysville, O.	2d best adult duck	1 00
M. M. Myers	Marysville, O.	Best young duck	2 00
Chas. McClave	New London, O.	2d best young duck	1 00
J. I. Myers	New Dover, O.	3d best young duck	50

GEESE.

Name.	Postoffice.	Awards.	Amount.
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GRAY TOULOUSE.

J. I. Myers	New Dover, O.	Best adult gander	\$2 00
M. M. Myers	Marysville, O.	2d best adult gander	1 00
Trout & Nusser	Postoria, O.	3d best adult gander	50
Chas. McClave	New London, O.	Best young gander	2 00
M. M. Myers	Marysville, O.	2d best young gander	1 00
Wilson & Chambers	Doylestown, O.	3d best young gander	50
Trout & Nusser	Postoria, O.	Best adult goose	2 00
M. M. Myers	Marysville, O.	2d best adult goose	2 00
Chas. McClave	New London, O.	Best young goose	2 00
M. M. Myers	Marysville, O.	2d best young goose	1 00
Wilson & Chambers	Doylestown, O.	3d best young goose	50

WHITE EMBDEN.

Trout & Nusser	Postoria, O.	Best adult gander	\$2 00
J. I. Myers	New Dover, O.	2d best adult gander	1 00
M. M. Myers	Marysville, O.	3d best adult gander	50
J. I. Myers	New Dover, O.	Best young gander	2 00
M. M. Myers	Marysville, O.	2d best young gander	1 00
Wilson Bros.	Springfield, O.	3d best young gander	50
J. I. Myers	New Dover, O.	Best adult goose	2 00
Trout & Nusser	Postoria, O.	2d best adult goose	1 00
M. M. Myers	Marysville, O.	3d best adult goose	50
Wilson Bros.	Springfield, O.	Best young goose	2 00
M. M. Myers	Marysville, O.	2d best young goose	1 00
J. I. Myers	New Dover, O.	3d best young goose	50

GRAY AFRICAN.

Chas. McClave	New London, O.	Best adult gander	\$2 00
Trout & Nusser	Postoria, O.	2d best adult gander	1 00
J. I. Myers	New Dover, O.	3d best adult gander	50
Chas. McClave	New London, O.	Best young gander	2 00
M. M. Myers	Marysville, O.	2d best young gander	1 00
Chas. McClave	New London, O.	Best adult goose	2 00
Trout & Nusser	Postoria, O.	2d best adult goose	1 00
J. I. Myers	New Dover, O.	3d best adult goose	50
Chas. McClave	New London, O.	Best young goose	2 00
M. M. Myers	Marysville, O.	2d best young goose	1 00
Trout & Nusser	Postoria, O.	3d best young goose	50

POULTRY—Concluded.

Name.	Postoffice.	Awards.	Amount.
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BROWN CHINESE.

Chas. McClave	New London, O.	Best adult gander.....	\$2 00
Trout & Nusser	Postoria, O.	2d best adult gander.....	1 00
J. I. Myers	New Dover, O.	3d best adult gander.....	50
M. M. Myers	Marysville, O.	Best young gander.....	2 00
Wilson Bros	Springfield, O.	2d best young gander.....	1 00
M. M. Myers	Marysville, O.	Best adult goose.....	2 00
J. I. Myers	New Dover, O.	2d best adult goose.....	1 00
Chas. McClave	New London, O.	3d best adult goose.....	50
M. M. Myers	Marysville, O.	Best young goose.....	2 00
Wilson Bros	Springfield, O.	2d best young goose.....	1 00

WHITE CHINESE.

Trout & Nusser	Postoria, O.	Best adult gander.....	\$2 00
M. M. Myers	Marysville, O.	2d best adult gander.....	1 00
Chas. McClave	New London, O.	3d best gander.....	50
M. M. Myers	Marysville, O.	Best young gander.....	2 00
Chas. McClave	New London, O.	2d best young gander.....	1 00
Wilson Bros	Springfield, O.	3d best young gander.....	50
M. M. Myers	Marysville, O.	Best adult goose.....	2 00
J. I. Myers	New Dover, O.	2d best adult goose.....	1 00
Wilson Bros	Springfield, O.	3d best adult goose.....	50
Chas. McClave	New London, O.	Best young goose.....	2 00
M. M. Myers	Marysville, O.	2d best young goose.....	1 00
Wilson Bros	Springfield, O.	3d best young goose.....	50

GRAY CANADIAN (WILD)

Chas. McClave	New London, O.	Best adult gander.....	\$2 00
M. M. Myers	Marysville, O.	2d best adult gander.....	1 00
Wilson Bros	Springfield, O.	3d best adult gander.....	50
M. M. Myers	Marysville, O.	Best young gander.....	2 00
Chas. McClave	New London, O.	2d best young gander.....	1 00
M. M. Myers	Marysville, O.	3d best young gander.....	50
M. M. Myers	Marysville, O.	Best adult goose.....	2 00
Chas. McClave	New London, O.	2d best adult goose.....	1 00
Trout & Nusser	Postoria, O.	3d best adult goose.....	50
Chas. McClave	New London, O.	Best young goose.....	2 00
M. M. Myers	Marysville, O.	2d best young goose.....	1 00
M. M. Myers	Marysville, O.	3d best young goose.....	50

COLORED EGYPTIAN.

Julius Frank & Son	Akron, O.	Best adult gander.....	\$2 00
Julius Frank & Son	Akron, O.	Best young gander.....	2 00
Julius Frank & Son	Akron, O.	Best adult goose.....	2 00
Julius Frank & Son	Akron, O.	2d best adult goose.....	1 00
Julius Frank & Son	Akron, O.	Best young goose.....	2 00

SIXTH DEPARTMENT—FARM PRODUCTS.

W. G. FARNSWORTH, Member in Charge.

T. E. ADAMS Superintendent.
H. F. FRICKE Clerk.

JUDGES.

C. G. WILLIAMS, J. S. BRIGHAM, C. A. PATTON, A. G. McCALL, L. P. BAILEY, CHAS. WEBER,
A. D. SELBY.

Received from sale of floor space, 1912.....	\$356 30
Premiums offered, 1912.....	3,728 50
Premiums paid, 1912.....	3,502 50
Total number of entries, 1912—3,101.	
Paid superintendents, judges, etc., 1912.....	\$282 93
Received from sale of floor space, 1911.....	\$329 29
Premiums offered, 1911.....	3,396 50
Premiums paid, 1911.....	3,028 50
Total number of entries, 1911—3,333.	
Paid superintendents, judges, etc., 1911.....	\$254 90
Received from sale of floor space, 1910.....	\$176 95
Premiums offered, 1910.....	3,389 00
Premiums paid, 1910.....	3,020 00
Total number of entries, 1910—3,009.	
Paid superintendents, judges, etc., 1910.....	\$186 75

GRAINS, SEEDS, TOBACCOS AND CEREAL MILL PRODUCTS.

Name of Owner.	Postoffice.	Awards.	Amount.
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WHITE WHEAT—SMOOTH.

I. B. Keckley.....	Marysville, O., R. D. 3.....	Best peck Dawson's Golden Chaff.....	\$3 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	2d best peck Dawson's Golden Chaff.....	2 00
F. M. Whipps.....	Peoria, O., R. D. 2.....	3d best peck Dawson's Golden Chaff.....	1 00
A. H. Powell.....	Newark, O.....	Best peck Golden Coin.....	3 00
I. B. Keckley.....	Marysville, O.....	2d best peck Golden Coin.....	2 00
W. D. Whipps.....	Marion, O.....	3d best peck Golden Coin.....	1 00
Wilber E. Morris.....	Urbana, O.....	Best peck any other variety.....	3 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	2d best peck any other variety.....	2 00
I. B. Keckley.....	Marysville, O.....	3d best peck any other variety.....	1 00

WHITE WHEAT—BEARDED.

J. T. Purks.....	Newark, O.....	Best peck Democrat.....	\$3 00
A. H. Powell.....	Newark, O.....	2d best peck Democrat.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Democrat.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck Jones Long Berry.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Jones Long Berry.....	2 00
J. T. Purks.....	Newark, O.....	3d best peck Jones Long Berry.....	1 00
I. B. Keckley.....	Marysville, O.....	Best peck any other variety.....	3 00
J. L. Keckley.....	Marysville, O.....	2d best peck any other variety.....	2 00

RED WHEAT—SMOOTH.

W. D. Whipps.....	Marion, O.....	Best peck Poole.....	\$3 00
F. M. Whipps.....	Peoria, O.....	2d best peck Poole.....	2 00
Wilber E. Morris.....	Urbana, O.....	3d best peck Poole.....	1 00
I. B. Keckley.....	Marysville, O.....	Best peck Fultz.....	3 00
J. L. Keckley.....	Marysville, O.....	2d best peck Fultz.....	2 00
W. D. Whipps.....	Marion, O.....	3d best peck Fultz.....	1 00
W. D. Whipps.....	Marion, O.....	Best peck Red Cross.....	3 00
I. B. Keckley.....	Marysville, O., R. D. 3.....	2d best peck Red Cross.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck Red Cross.....	1 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	Best peck any other variety.....	3 00
I. B. Keckley.....	Marysville, O.....	2d best peck any other variety.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck any other variety.....	1 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
RED WHEAT—BEARDED.			
I. B. Keckley.....	Marysville, O.....	Best peck Nigger.....	\$3 00
W. D. Whipps.....	Marion, O.....	2d best peck Nigger.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Nigger.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck Gypsy.....	3 00
Nelson Doeberst.....	West Mansfield, O.....	2d best peck Gypsy.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Gypsy.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck Mediterranean.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Mediterranean.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Mediterranean.....	1 00
I. B. Keckley.....	Marysville, O.....	Best peck any other variety.....	3 00
J. L. Keckley.....	Marysville, O.....	2d best peck any other variety.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck any other variety.....	1 00
OATS.			
J. T. Purks.....	Newark, O.....	Best peck black.....	\$5 00
Albert Pearce.....	Akron, O., R. D. 4.....	2d best peck black.....	3 00
Hilas E. Craig.....	Groveport, O.....	3d best peck black.....	2 00
Albert Pearce.....	Akron, O.....	Best peck white.....	5 00
Wilber E. Morris.....	Urbana, O.....	2d best peck white.....	3 00
W. D. Whipps.....	Marion, O.....	3d best peck white.....	2 00
W. D. Whipps.....	Marion, O.....	Best display of six varieties.....	10 00
A. H. Powell.....	Newark, O.....	2d best display of six varieties.....	5 00
J. L. Keckley.....	Marysville, O.....	3d best display of six varieties.....	3 00
BARLEY, RYE, ETC.			
W. D. Whipps.....	Marion, O.....	Best peck White Winter Rye.....	\$3 00
Wilber E. Morris.....	Urbana, O., R. D. 4.....	2d best peck White Winter Rye.....	2 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	3d best peck White Winter Rye.....	1 00
C. S. Rice.....	Spencer, O.....	Best peck Black Winter Rye.....	3 00
Albert Pearce.....	Akron, O., R. D. 4.....	2d best peck Black Winter Rye.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck Black Winter Rye.....	1 00
A. H. Powell.....	Newark, O.....	Best peck barley.....	3 00
J. L. Keckley.....	Marysville, O.....	2d best peck Barley.....	2 00
J. T. Purks.....	Newark, O.....	3d best peck Barley.....	1 00
J. B. Keckley.....	Marysville, O.....	Best peck Buckwheat.....	3 00
J. L. Keckley.....	Marysville, O.....	2d best peck Buckwheat.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Buckwheat.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck common Flaxseed.....	3 00
J. B. Keckley.....	Marysville, O.....	2d best peck common Flaxseed.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck common Flaxseed.....	1 00
J. B. Keckley.....	Marysville, O.....	Best peck Canada Field Peas.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Canada Field Peas.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Canada Field Peas.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck Marrow-fat Field Peas.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Marrow-fat Field Peas.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Marrow-fat Field Peas.....	1 00
GRASS SEEDS.			
W. D. Whipps.....	Marion, O.....	Best peck Timothy.....	\$3 00
Albert Pearce.....	Akron, O.....	2d best peck Timothy.....	2 00
J. L. Keckley.....	Marysville, O.....	3d best peck Timothy.....	1 00
C. E. Leavitt.....	Mechanicsburg, O.....	Best peck Kentucky Blue Grass.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Kentucky Blue Grass.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Kentucky Blue Grass.....	1 00
F. M. Whipps.....	Peoria, O.....	Best peck Orchard Grass.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Orchard Grass.....	2 00
C. S. Rice.....	Spencer, O.....	3d best peck Orchard Grass.....	1 00
J. L. Keckley.....	Marysville, O.....	Best peck Red Top.....	3 00
F. M. Whipps.....	Peoria, O., R. D. 2.....	2d best peck Red Top.....	2 00
W. D. Whipps.....	Marion, O.....	3d best peck Red Top.....	1 00
J. B. Keckley.....	Marysville, O.....	Best peck Millet.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Millet.....	2 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	3d best peck Millet.....	1 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	Best peck Hungarian Grass.....	3 00
W. D. Whipps.....	Marion, O.....	2d best peck Hungarian Grass.....	2 00
I. B. Keckley.....	Marysville, O.....	3d best peck Hungarian Grass.....	1 00
CLOVER SEED			
G. W. Scott.....	Carroll, O.....	Best peck Mammoth Red.....	\$3 00
J. L. Keckley.....	Marysville, O.....	2d best peck Mammoth Red.....	2 00
W. D. Whipps.....	Marion, O.....	3d best peck Mammoth Red.....	1 00
G. W. Scott.....	Carroll, O.....	Best peck Common Red.....	3 00
Wilber E. Morris.....	Urbana, O., R. D. 4.....	2d best peck Common Red.....	2 00
W. D. Whipps.....	Marion, O.....	3d best peck Common Red.....	1 00
I. B. Keckley.....	Marysville, O.....	Best peck Alsike.....	3 00
Wilber E. Morris.....	Urbana, O., R. D. 4.....	2d best peck Alsike.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck Alsike.....	1 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount
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CLOVER SEED—Concluded.

J. L. Keckley.....	Marysville, O.....	Best peck Crimson.....	\$3 00
W. D. Whipps.....	Marion, O.....	2d best peck Crimson.....	2 00
Nelson Doeber.....	West Mansfield, O., R. D.....	3d best peck Crimson.....	1 00
Wilber E. Morris.....	Urbana, O.....	Best peck Alfalfa.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Alfalfa.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck Alfalfa.....	1 00
J. T. Purks.....	Newark, O.....	Best peck White.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck White.....	2 00
F. M. Whipps.....	Peoria, O.....	3d best peck White.....	1 00
F. M. Whipps.....	Peoria, O.....	Best display of Grasses.....	15 00
A. H. Powell.....	Newark, O.....	2d best display of Grasses.....	10 00
C. A. Rice.....	Spencer, O.....	3d best display of Grasses.....	5 00

TOBACCO.

I. B. Keckley.....	Marysville, O., R. D. 3.....	Best four hands Ohio Seed Leaf.....	\$8 00
J. L. Keckley.....	Marysville, O.....	2d best four hands Ohio Seed Leaf.....	4 00
F. M. Whipps.....	Peoria, O.....	3d best four hands Ohio Seed Leaf.....	3 00
F. M. Whipps.....	Peoria, O.....	Best four hands White Burley.....	8 00
J. L. Keckley.....	Marysville, O.....	2d best four hands White Burley.....	4 00
Hilas E. Craig.....	Groveport, O.....	3d best four hands White Burley.....	3 00
J. T. Purks.....	Newark, O.....	Best four hands Little Dutch.....	8 00
J. T. Purks.....	Newark, O.....	Best four hands Zimmer's Spanish.....	8 00
A. H. Powell.....	Newark, O.....	2d best four hands Zimmer's Spanish.....	4 00
Hilas E. Craig.....	Groveport, O.....	3d best four hands Zimmer's Spanish.....	3 00

CORN.

Name of Owner.	Postoffice.	Awards.	Amount.
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YELLOW CORN.

G. W. Scott.....	Carroll, O.....	Best 10 ears Golden Surprise.....	\$4 00
A. H. Powell.....	Newark, O.....	2d best 10 ears Golden Surprise.....	3 00
G. W. Scott.....	Carroll, O.....	3d best 10 ears Golden Surprise.....	2 00
I. B. Keckley.....	Marysville, O., R. D. 3.....	Best 10 ears Beauty.....	4 00
A. H. Powell.....	Newark, O.....	2d best 10 ears Beauty.....	3 00
J. T. Purks.....	Newark, O.....	3d best 10 ears Beauty.....	2 00
G. W. Scott.....	Carroll, O.....	Best 10 ears Improved Leaming.....	4 00
G. W. Scott.....	Carroll, O.....	2d best 10 ears of Improved Leaming.....	3 00
Earle P. Johnson.....	Painesville, O., R. D. 4.....	3d best 10 ears Improved Leaming.....	2 00
J. L. Keckley.....	Marysville, O.....	Best 10 ears Reid's Yellow Dent.....	4 00
Wilber E. Morris.....	Urbana, O., R. D. 4.....	2d best 10 ears Reid's Yellow Dent.....	3 00
I. B. Keckley.....	Marysville, O.....	3d best 10 ears Reid's Yellow Dent.....	2 00
J. T. Purks.....	Newark, O.....	Best 10 ears Clarage.....	4 00
J. L. Keckley.....	Marysville, O.....	2d best 10 ears Clarage.....	3 00
I. B. Keckley.....	Marysville, O.....	3d best 10 ears Clarage.....	2 00
J. L. Keckley.....	Marysville, O.....	Best 10 ears Gold Coin.....	4 00
J. T. Purks.....	Newark, O.....	2d best 10 ears Gold Coin.....	3 00
G. W. Scott.....	Carroll, O.....	3d best 10 ears Gold Coin.....	2 00
G. W. Scott.....	Carroll, O.....	Best 10 ears any other variety.....	4 00
W. D. Whipps.....	Marion, O.....	2d best 10 ears any other variety.....	3 00
I. B. Keckley.....	Marysville, O.....	3d best 10 ears any other variety.....	2 00

WHITE CORN.

J. L. Keckley.....	Marysville, O.....	Best 10 ears Boone County.....	\$4 00
I. B. Keckley.....	Marysville, O.....	2d best 10 ears Boone County.....	3 00
W. D. Whipps.....	Marion, O.....	3d best 10 ears Boone County.....	2 00
J. L. Keckley.....	Marysville, O.....	Best 10 ears Silver Mine.....	4 00
I. B. Keckley.....	Marysville, O.....	2d best 10 ears Silver Mine.....	3 00
A. H. Powell.....	Newark, O.....	3d best 10 ears Silver Mine.....	2 00
J. T. Purks.....	Newark, O.....	Best 10 ears White Cap.....	4 00
A. H. Powell.....	Newark, O.....	2d best 10 ears White Cap.....	3 00
W. D. Whipps.....	Marion, O.....	3d best 10 ears White Cap.....	2 00
I. B. Keckley.....	Marysville, O.....	Best 10 ears any other variety.....	4 00
J. L. Keckley.....	Marysville, O.....	2d best 10 ears any other variety.....	3 00
A. H. Powell.....	Newark, O.....	3d best 10 ears any other variety.....	2 00

FLINT CORN.

A. H. Powell.....	Newark, O.....	Best 10 ears White Flint.....	\$3 00
G. W. Scott.....	Carroll, O.....	2d best 10 ears White Flint.....	2 00
J. L. Keckley.....	Marysville, O.....	3d best 10 ears White Flint.....	1 00
G. W. Scott.....	Carroll, O.....	Best 10 ears Yellow Flint.....	3 00
Wilber E. Morris.....	Urbana, O., R. D. 4.....	2d best 10 ears Yellow Flint.....	2 00
J. L. Keckley.....	Marysville, O.....	3d best 10 ears Yellow Flint.....	1 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
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COLORED CORN.

I. B. Keckley.....	Marysville, O.....	Best 10 ears Red Butcher.....	\$3 00
J. L. Keckley.....	Marysville, O.....	2d best 10 ears Red Butcher.....	2 00
A. H. Powell.....	Newark, O.....	3d best 10 ears Red Butcher.....	1 00
J. L. Keckley.....	Marysville, O.....	Best 10 ears Northwestern Gingham.....	3 00
A. H. Powell.....	Newark, O.....	2d best 10 ears Northwestern Gingham.....	2 00
J. T. Purks.....	Newark, O.....	3d best 10 ears Northwestern Gingham.....	1 00
G. W. Scott.....	Carroll, O.....	Best 10 ears any other variety.....	3 00
I. B. Keckley.....	Marysville, O.....	2d best 10 ears any other variety.....	2 00
J. L. Keckley.....	Marysville, O.....	3d best 10 ears any other variety.....	1 00

POP CORN.

J. T. Purks.....	Newark, O.....	Best 10 ears White Popcorn.....	\$2 50
G. W. Scott.....	Carroll, O.....	2d best 10 ears White Popcorn.....	1 50
G. W. Scott.....	Carroll, O.....	3d best 10 ears White Popcorn.....	50
A. H. Powell.....	Newark, O.....	Best 10 ears Red Popcorn.....	2 50
J. T. Purks.....	Newark, O.....	2d best 10 ears Red Popcorn.....	1 50
J. L. Keckley.....	Marysville, O.....	3d best 10 ears Red Popcorn.....	50
G. W. Scott.....	Carroll, O.....	Best 10 ears Yellow Popcorn.....	2 50
A. H. Powell.....	Newark, O.....	2d best 10 ears Yellow Popcorn.....	1 50
J. T. Purks.....	Newark, O.....	3d best 10 ears Yellow Popcorn.....	50

SWEET CORN.

A. H. Powell.....	Newark, O.....	Best 10 ears Early Sweet Corn, 1912.....	\$3 00
J. T. Purks.....	Newark, O.....	2d best 10 ears Early Sweet Corn, 1912.....	2 00
Paul P. Larkin.....	South Charleston, O.....	3d best 10 ears Early Sweet Corn, 1912.....	1 00
A. H. Powell.....	Newark, O.....	Best 10 ears Late Sweet Corn, 1911.....	3 00
G. W. Scott.....	Carroll, O.....	2d best 10 ears Late Sweet Corn, 1911.....	2 00
J. L. Keckley.....	Marysville, O.....	3d best 10 ears Late Sweet Corn, 1911.....	1 00

BEST DISPLAYS 10 VARIETIES.

G. W. Scott.....	Carroll, O.....	Best Yellow Field Corn.....	\$15 00
A. H. Powell.....	Newark, O.....	2d best Yellow Field Corn.....	10 00
W. D. Whippa.....	Marion, O.....	3d best Yellow Field Corn.....	5 00
J. L. Keckley.....	Marysville, O.....	Best White Field Corn.....	15 00
I. B. Keckley.....	Marysville, O.....	2d best White Field Corn.....	10 00
W. D. Whippa.....	Marion, O.....	3d best White Field Corn.....	5 00
A. H. Powell.....	Newark, O.....	Best Sweet Corn.....	8 00
G. W. Wildman.....	Springfield, O., R. D. 8.....	2d best Sweet Corn.....	5 00
W. D. Whippa.....	Marion, O.....	3d best Sweet Corn.....	3 00
J. L. Keckley.....	Marysville, O.....	Best display Colored Field Corn.....	5 00
A. H. Powell.....	Newark, O.....	2d best display Colored Field Corn.....	3 00
G. W. Scott.....	Carroll, O.....	3d best display Colored Field Corn.....	2 00
A. H. Powell.....	Newark, O.....	Best display Popcorn.....	5 00
J. T. Purks.....	Newark, O.....	2d best display Popcorn.....	3 00
J. L. Anderson & Son.....	Worthington, O.....	3d best display Popcorn.....	2 00
W. W. Bailey.....	Yellow Springs, O.....	Best display corn on stalk.....	15 00
G. W. Wildman.....	Springfield, O., R. D. 8.....	2d best display corn on stalk.....	10 00
Elmer Husted.....	Husted, O.....	3d best display corn on stalk.....	5 00
Nelson Doebert.....	West Mansfield, O.....	Best 20 pounds Broom Corn.....	2 00
J. T. Purks.....	Newark, O.....	2d best 20 pounds Broom Corn.....	1 00
Hilas E. Craig.....	Groveport, O.....	3d best 20 pounds Broom Corn.....	50

SWEEPSTAKES.

J. L. Keckley.....	Marysville, O., R. D. 3.....	Best 10 ears Yellow Corn, any variety.....	\$5 00
Wilbur E. Morris.....	Urbana, O., R. D. 4.....	2d best 10 ears Yellow Corn, any variety.....	3 00
G. W. Scott.....	Carroll, O.....	3d best 10 ears Yellow Corn, any variety.....	2 00
J. L. Keckley.....	Marysville, O.....	Best 10 ears White Corn, any variety.....	5 00
J. L. Keckley.....	Marysville, O.....	2d best 10 ears White Corn, any variety.....	3 00
I. B. Keckley.....	Marysville, O.....	3d best 10 ears White Corn, any variety.....	2 00
J. T. Purks.....	Newark, O.....	Best 10 ears Popcorn, any variety.....	5 00
G. W. Scott.....	Carroll, O.....	2d best 10 ears Popcorn, any variety.....	3 00
G. W. Scott.....	Carroll, O.....	3d best 10 ears Popcorn, any variety.....	2 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	Best Single Ear Corn, any variety.....	5 00
G. W. Scott.....	Carroll, O.....	2d best Single Ear Corn, any variety.....	3 00
I. B. Keckley.....	Marysville, O., R. D. 3.....	3d best Single Ear Corn, any variety.....	2 00
J. L. Keckley.....	Marysville, O., R. D. 3.....	Best Corn Design.....	15 00
G. W. Scott.....	Carroll, O.....	2d best Corn Design.....	10 00
A. H. Powell.....	Newark, O.....	3d best Corn Design.....	5 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
POTATOES AND ROOTS.			
C. C. Breece.	Delaware, O., R. D. 3.	Best peck American Giant.	\$2 00
Hilas E. Craig	Groveport, O.	2d best peck American Giant.	1 00
J. T. Purks	Newark, O.	3d best peck American Giant.	50
A. H. Powell	Newark, O.	Best peck Banner.	\$2 00
Hilas E. Craig	Groveport, O.	2d best peck Banner.	1 00
C. C. Breece.	Delaware, O., R. D. 3.	3d best peck Banner.	50
A. H. Powell	Newark, O.	Best peck Beauty of Hebron.	2 00
C. C. Breece.	Delaware, O.	2d best peck Beauty of Hebron.	1 00
Hilas E. Craig	Groveport, O.	3d best peck Beauty of Hebron.	50
J. T. Purks	Newark, O.	Best peck Bliss Triumph.	2 00
A. H. Powell	Newark, O.	2d best peck Bliss Triumph.	1 00
W. D. Whippis.	Marion, O.	3d best peck Bliss Triumph.	50
J. L. Keckley	Marysville, O.	Best peck Burpee's Early.	2 00
A. H. Powell	Newark, O.	2d best peck Burpee's Early.	1 00
J. T. Purks	Newark, O.	3d best peck Burpee's Early.	50
W. W. Bailey	Yellow Springs, O.	Best peck Carman No. 3.	2 00
C. C. Breece.	Delaware, O., R. D. 3.	2d best peck Carman No. 3.	1 00
A. H. Powell	Newark, O.	3d best peck Carman No. 3.	50
A. H. Powell	Newark, O.	Best peck Early Ohio.	2 00
J. L. Keckley	Marysville, O.	2d best peck Early Ohio.	1 00
Wilbur E. Morris	Urbana, O.	3d best peck Early Ohio.	50
J. T. Purks	Newark, O.	Best peck Early Rose.	2 00
A. H. Powell	Newark, O.	2d best peck Early Rose.	1 00
Nelson Doeberst.	West Mansfield, O., R. D.	3d best peck Early Rose.	50
A. H. Powell	Newark, O.	Best peck Early Michigan.	2 00
A. H. Powell	Newark, O.	Best peck Early Trumbull.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Early Trumbull.	1 00
A. H. Powell	Newark, O.	Best peck Irish Cobbler.	2 00
J. L. Keckley	Marysville, O.	2d best peck Irish Cobbler.	1 00
F. H. Whippis.	Peoria, O.	3d best peck Irish Cobbler.	50
Hilas E. Craig	Groveport, O.	Best peck Maggie Murphy.	2 00
C. C. Breece.	Delaware, O.	2d best peck Maggie Murphy.	1 00
W. W. Bailey	Yellow Springs, O.	3d best peck Maggie Murphy.	50
Albert Pearce	Akron, O.	Best peck Livingston.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Livingston.	1 00
F. M. Whippis.	Peoria, O.	3d best peck Livingston.	50
J. L. Keckley	Marysville, O.	Best peck Michigan Russet.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Michigan Russet.	1 00
A. H. Powell	Newark, O.	3d best peck Michigan Russet.	50
J. L. Keckley	Marysville, O.	Best peck Potentate.	2 00
F. M. Whippis.	Peoria, O.	2d best peck Potentate.	1 00
A. H. Powell	Newark, O.	3d best peck Potentate.	50
J. L. Keckley	Marysville, O.	Best peck Pride of Britton.	2 00
A. H. Powell	Newark, O.	2d best peck Pride of Britton.	1 00
Hilas E. Craig	Groveport, O.	3d best peck Pride of Britton.	50
A. H. Powell	Newark, O.	Best peck Prosperity.	2 00
Geo. W. Lee.	Canal Winchester, O.	Best peck Rural New Yorker.	2 00
Wilbur E. Morris	Urbana, O., R. D. 4.	2d best peck Rural New Yorker.	1 00
C. C. Breece.	Delaware, O., R. D. 3.	3d best peck Rural New Yorker.	50
Hilas E. Craig	Groveport, O.	Best peck Sensation.	2 00
J. T. Purks	Newark, O.	2d best peck Sensation.	1 00
J. L. Keckley	Marysville, O.	3d best peck Sensation.	50
Hilas E. Craig	Groveport, O.	Best peck Red Seneca Beauty.	2 00
C. C. Breece.	Delaware, O.	2d best peck Red Seneca Beauty.	1 00
A. H. Powell	Newark, O.	3d best peck Red Seneca Beauty.	50
Columbus Market Gard- eners' Ass'n.	Columbus, O.	Best peck Sir Walter Raleigh.	2 00
A. H. Powell	Newark, O.	2d best peck Sir Walter Raleigh.	1 00
W. W. Bailey	Yellow Springs, O.	3d best peck Sir Walter Raleigh.	50
A. H. Powell	Newark, O.	Best peck Uncle Sam.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Uncle Sam.	1 00
C. C. Breece.	Delaware, O.	3d best peck Uncle Sam.	50
J. L. Keckley	Marysville, O.	Best peck Vermont Gold Coin.	2 00
A. H. Powell	Newark, O.	2d best peck Vermont Gold Coin.	1 00
Hilas E. Craig	Groveport, O.	3d best peck Vermont Gold Coin.	50
Hilas E. Craig	Groveport, O.	Best peck White Ohio.	2 00
F. M. Whippis.	Peoria, O.	2d best peck White Ohio.	1 00
J. L. Keckley	Marysville, O.	3d best peck White Ohio.	50
A. H. Powell	Newark, O.	Best peck Whiton's White Mammoth.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Whiton's White Mammoth.	1 00
F. M. Whippis.	Peoria, O.	3d best peck Whiton's White Mammoth.	50
A. H. Powell	Newark, O.	Best display 25 varieties Irish Potatoes.	20 00
W. W. Bailey	Yellow Springs, O.	2d best display 25 varieties Irish Potatoes.	15 00
J. L. Anderson & Son.	Worthington, O.	Best peck Yellow Sweet Potatoes.	2 00
F. M. Whippis.	Peoria, O.	2d best peck Yellow Sweet Potatoes.	1 00
A. H. Powell	Newark, O.	3d best peck Yellow Sweet Potatoes.	50
A. H. Powell	Newark, O.	Best peck Red Sweet Potatoes.	2 00
Hilas E. Craig	Groveport, O.	2d best peck Red Sweet Potatoes.	1 00
A. H. Powell	Newark, O.	Best peck White Sweet Potatoes.	2 00
Hilas E. Craig	Groveport, O.	2d best peck White Sweet Potatoes.	1 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
POTATOES—Concluded.			
A. H. Powell	Newark, O.	Best peck Red Yams	\$2 00
Hilas E. Craig	Groveport, O.	2d best peck Red Yams	1 00
Hilas E. Craig	Groveport, O.	Best peck White Yams	2 00
A. H. Powell	Newark, O.	2d best peck White Yams	1 00
Hilas E. Craig	Groveport, O.	Best display 6 varieties Sweet Potatoes and Yams	4 00
A. H. Powell	Newark, O.	2d best display 6 varieties Sweet Potatoes and Yams	2 00

ROOTS.

A. H. Powell	Newark, O.	Best 12 Carrots, Chanteney	\$2 00
J. T. Purks	Newark, O.	2d best 12 Carrots, Chanteney	1 00
J. L. Keckley	Marysville, O.	3d best 12 Carrots, Chanteney	50
W. W. Bailey	Yellow Springs, O.	Best 12 Carrots, Long Orange	2 00
Nelson Doebert	West Mansfield, O.	2d best 12 Carrots, Long Orange	1 00
A. H. Powell	Newark, O.	3d best 12 Carrots, Long Orange	50
Nelson Doebert	West Mansfield, O.	Best 12 Carrots, Oxheart	2 00
C. C. Breece	Delaware, O.	2d best 12 Carrots, Oxheart	1 00
Wilbur E. Morris	Urbana, O.	3d best 12 Carrots, Oxheart	50
Albert Pearce	Akron, O.	Best 12 Carrots, White Belgian	2 00
J. L. Keckley	Marysville, O.	2d best 12 Carrots, White Belgian	1 00
W. W. Bailey	Yellow Springs, O.	3d best 12 Carrots, White Belgian	50
J. L. Keckley	Marysville, O.	Best 12 Carrots, Yellow Belgian	2 00
Albert Pearce	Akron, O.	2d best 12 Carrots, Yellow Belgian	1 00
W. W. Bailey	Yellow Springs, O.	3d best 12 Carrots, Yellow Belgian	50
A. H. Powell	Newark, O.	Best display Carrots, six varieties	3 00
W. W. Bailey	Yellow Springs, O.	2d best display Carrots, six varieties	2 50
Wilbur E. Morris	Urbana, O., R. D. 4	3d best display Carrots, six varieties	1 00
Columbus Market Gardeners' Association	Columbus, O.	Best 12 Parsnips	2 00
Wilbur E. Morris	Urbana, O., R. D. 4	2d best 12 Parsnips	1 00
W. W. Bailey	Yellow Springs, O.	3d best 12 Parsnips	50
Columbus Market Gardeners' Association	Columbus, O.	Best 12 roots Salsify	2 00
F. M. Whippis	Peoria, O.	2d best 12 roots Salsify	1 00
Albert Pearce	Akron, O.	3d best 12 roots Salsify	50
Hilas E. Craig	Groveport, O.	Best six Beets, Eclipse	2 00
W. W. Bailey	Yellow Springs, O.	2d best six Beets, Eclipse	1 00
Columbus Market Gardeners' Association	Columbus, O.	3d best six Beets, Eclipse	50
Hilas E. Craig	Groveport, O.	Best six Beets, Columbian	2 00
W. W. Bailey	Yellow Springs, O.	2d best six Beets, Columbian	1 00
J. L. Keckley	Marysville, O.	3d best six Beets, Columbian	50
J. L. Keckley	Marysville, O.	Best six Beets, Crosby's Egyptian	2 00
F. M. Whippis	Peoria, O.	2d best six Beets, Crosby's Egyptian	1 00
Columbus Market Gardeners' Association	Columbus, O.	3d best six Beets, Crosby's Egyptian	50
F. M. Whippis	Peoria, O.	Best six Beets, Dark Blood Turnip	2 00
J. L. Keckley	Marysville, O.	2d best six Beets, Dark Blood Turnip	1 00
I. B. Keckley	Marysville, O.	3d best six Beets, Dark Blood Turnip	50
Hilas E. Craig	Groveport, O.	Best six Beets, Long Blood	2 00
I. B. Keckley	Marysville, O.	2d best six Beets, Long Blood	1 00
W. W. Bailey	Yellow Springs, O.	3d best six Beets, Long Blood	50
A. H. Powell	Newark, O.	Best six Sugar Beets	2 00
J. T. Purks	Newark, O.	2d best six Sugar Beets	1 00
W. W. Bailey	Yellow Springs, O.	3d best six Sugar Beets	50
W. W. Bailey	Yellow Springs, O.	Best three Beets, Long Red, Mangel Wurzel	2 00
Hilas E. Craig	Groveport, O.	2d best three Beets, Long Red, Mangel Wurzel	1 00
A. H. Powell	Newark, O.	3d best three Beets, Long Red, Mangel Wurzel	50
J. L. Keckley	Marysville, O.	Best three Beets, Red Globe	2 00
Hilas E. Craig	Groveport, O.	2d best three Beets, Red Globe	1 00
W. W. Bailey	Yellow Springs, O.	3d best three Beets, Red Globe	50
G. W. Widman	Springfield, O., R. D. 8	Best three Beets, Yellow Globe	2 00
J. L. Keckley	Marysville, O.	2d best three Beets, Yellow Globe	1 00
A. H. Powell	Newark, O.	3d best three Beets, Yellow Globe	50
W. W. Bailey	Yellow Springs, O.	Best display of Beets, 12 varieties	5 00
J. L. Keckley	Marysville, O.	2d best display of Beets, 12 varieties	3 00
A. H. Powell	Newark, O.	3d best display of Beets, 12 varieties	2 00
J. L. Keckley	Marysville, O.	Best six Purple Kohlrabi	2 00
W. W. Bailey	Yellow Springs, O.	2d best six Purple Kohlrabi	1 00
Albert Pearce	Akron, O.	3d best six Purple Kohlrabi	50
J. L. Keckley	Marysville, O.	Best six White Kohlrabi	2 00
W. D. Whippis	Marion, O.	2d best six White Kohlrabi	1 00
Albert Pearce	Akron, O.	3d best six White Kohlrabi	50
Hilas E. Craig	Groveport, O.	Best six Rutabagas, white	2 00
W. W. Bailey	Yellow Springs, O.	2d best six Rutabagas, white	1 00
Albert Pearce	Akron, O.	Best six Rutabagas, yellow	2 00
Hilas E. Craig	Groveport, O.	2d best six Rutabagas, yellow	1 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
ROOTS—Concluded.			
W. W. Bailey.....	Yellow Springs, O.....	3d best Rutabagas, yellow.....	\$0 50
J. T. Purks.....	Newark, O.....	Best peck Turnips, Purple Top.....	2 00
A. H. Powell.....	Newark, O.....	2d best peck Turnips, Purple Top.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best peck Turnips, Purple Top.....	50
A. H. Powell.....	Newark, O.....	Best peck Turnips, White Top.....	2 00
C. C. Breece.....	Delaware, O., R. D. 3.....	Best peck Onions, Red Globe.....	2 00
J. L. Keckley.....	Marysville, O.....	2d best peck Onions, Red Globe.....	1 00
A. H. Powell.....	Newark, O.....	3d best peck Onions, Red Globe.....	50
C. C. Breece.....	Delaware, O., R. D. 3.....	Best peck Onions, White Globe.....	2 00
Nelson Doeberst.....	West Mansfield, O., R. D. 4.....	2d best peck Onions, White Globe.....	1 00
J. L. Keckley.....	Marysville, O.....	3d best peck Onions, White Globe.....	50
A. H. Powell.....	Newark, O.....	Best peck Onions, Yellow Globe Danvers.....	2 00
J. L. Keckley.....	Marysville, O.....	2d best peck Onions, Yellow Globe Danvers.....	1 00
Raymond Anderson.....	Worthington, O.....	3d best peck Onions, Yellow Globe Danvers.....	50
W. W. Bailey.....	Yellow Springs, O.....	Best peck Onions, Red Wethersfield.....	2 00
C. A. Rice.....	Spencer, O.....	2d best peck Onions, Red Wethersfield.....	1 00
C. C. Breece.....	Delaware, O., R. D. 3.....	3d best peck Onions, Red Wethersfield.....	50
W. W. Bailey.....	Yellow Springs, O.....	Best peck Onions, Prizetaker.....	2 00
M. Luther Peterson.....	Frankfort, O.....	2d best peck Onions, Prizetaker.....	1 00
J. T. Purks.....	Newark, O.....	3d best peck Onions, Prizetaker.....	50
Geo. W. Lee.....	Canal Winchester, O.....	Best peck Onions, Potato.....	2 00
A. H. Powell.....	Newark, O.....	2d best peck Onions, Potato.....	1 00
F. M. Whipps.....	Peoria, O.....	3d best peck Onions, Potato.....	50
W. W. Bailey.....	Yellow Springs, O.....	Best display Onions, 10 varieties.....	5 00
A. H. Powell.....	Newark, O.....	2d best display Onions, 10 varieties.....	3 00
J. L. Keckley.....	Marysville, O.....	3d best display Onions, 10 varieties.....	2 00

VEGETABLES.

Name of Owner.	Postoffice.	Awards.	Amount.
TOMATOES.			
J. T. Purks.....	Newark, O.....	Best peck Acme.....	\$3 00
A. H. Powell.....	Newark, O.....	2d best peck Acme.....	2 00
C. C. Breece.....	Delaware, O., R. D. 3.....	Best peck Buckeye State.....	3 00
Columbus Market Gardeners' Association.....	Columbus, O.....	2d best peck Buckeye State.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck Buckeye State.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	Best peck Beauty.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Beauty.....	2 00
C. C. Breece.....	Delaware, O.....	3d best peck Beauty.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	Best peck Coreless.....	3 00
J. T. Purks.....	Newark, O.....	2d best peck Coreless.....	2 00
A. H. Powell.....	Newark, O.....	3d best peck Coreless.....	1 00
J. T. Purks.....	Newark, O.....	Best peck Dwarf Champion.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Dwarf Champion.....	2 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best peck Dwarf Champion.....	1 00
A. H. Powell.....	Newark, O.....	Best peck Favorite.....	3 00
J. T. Purks.....	Newark, O.....	2d best peck Favorite.....	2 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best peck Favorite.....	1 00
J. T. Purks.....	Newark, O.....	Best peck Golden Queen.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Golden Queen.....	2 00
Wilbur E. Morris.....	Urbana, O., R. D. 4.....	3d best peck Golden Queen.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	Best peck New Globe.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck New Globe.....	2 00
Columbus Market Gardeners' Association.....	Columbus, O.....	Best peck Ponderosa.....	3 00
J. T. Purks.....	Newark, O.....	2d best peck Ponderosa.....	2 00
C. C. Breece.....	Delaware, O.....	3d best peck Ponderosa.....	1 00
J. T. Purks.....	Newark, O.....	Best peck Stone.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Stone.....	2 00
J. L. Anderson & Son.....	Worthington, O.....	3d best peck Stone.....	1 00
J. T. Purks.....	Newark, O.....	Best peck Magnus.....	3 00
Columbus Market Gardeners' Association.....	Columbus, O.....	2d best peck Magnus.....	2 00
C. C. Breece.....	Delaware, O., R. D. 4.....	3d best peck Magnus.....	1 00
J. T. Purks.....	Newark, O.....	Best peck Enormous.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Enormous.....	2 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
TOMATOES—Concluded.			
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best peck Enormous.....	\$1 00
J. T. Purks.....	Newark, O.....	Best peck Jewel.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Jewel.....	2 00
J. L. Anderson & Son.....	Worthington, O.....	3d best peck Jewel.....	1 00
Mary Stuart.....	Jacksontown, O.....	Best peck Yellow Pear.....	3 00
A. H. Powell.....	Newark, O.....	2d best peck Yellow Pear.....	2 00
J. T. Purks.....	Newark, O.....	3d best peck Yellow Pear.....	1 00
A. H. Powell.....	Newark, O.....	Best display Tomatoes, 10 varieties.....	10 00
Columbus Market Gardeners' Association.....	Columbus, O.....	2d best display Tomatoes, 10 varieties.....	6 00
W. W. Bailey.....	Yellow Springs, O.....	3d best display Tomatoes, 10 varieties.....	4 00

CABBAGE.

Hilas E. Craig.....	Groveport, O.....	Best All Seasons.....	\$2 00
C. S. Rice.....	Spencer, O.....	2d best All Seasons.....	1 00
J. L. Anderson & Son.....	Worthington, O.....	3d best All Seasons.....	50
Columbus Market Gardeners' Association.....	Columbus, O.....	Best Autumn King.....	2 00
Hilas E. Craig.....	Groveport, O.....	2d best Autumn King.....	1 00
J. T. Purks.....	Newark, O.....	3d best Autumn King.....	50
J. L. Anderson & Son.....	Worthington, O.....	Best Surehead.....	2 00
W. W. Bailey.....	Yellow Springs, O.....	2d best Surehead.....	1 00
Hilas E. Craig.....	Groveport, O.....	3d best Surehead.....	50
C. C. Breece.....	Delaware, O., R. D. 3.....	Best Flat Dutch.....	2 00
Hilas E. Craig.....	Groveport, O.....	2d best Flat Dutch.....	1 00
W. W. Bailey.....	Yellow Springs, O.....	3d best Flat Dutch.....	50
Hilas E. Craig.....	Groveport, O.....	Best Drumhead.....	2 00
A. H. Powell.....	Newark, O.....	2d best Drumhead.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best Drumhead.....	50
G. W. Wildman.....	Springfield, O., R. D. 8.....	Best Red Dutch.....	2 00
W. W. Bailey.....	Yellow Springs, O.....	2d best Red Dutch.....	1 00
A. H. Powell.....	Newark, O.....	3d best Red Dutch.....	50
Hilas E. Craig.....	Groveport, O.....	Best Winninstadt.....	2 00
A. H. Powell.....	Newark, O.....	2d best Winninstadt.....	1 00
W. W. Bailey.....	Yellow Springs, O.....	3d best Winninstadt.....	50
W. W. Bailey.....	Yellow Springs, O.....	Best Early Summer.....	2 00
Hilas E. Craig.....	Groveport, O.....	2d best Early Summer.....	1 00
A. H. Powell.....	Newark, O.....	3d best Early Summer.....	50
A. H. Powell.....	Newark, O.....	Best Danish Ball.....	2 00
J. T. Purks.....	Newark, O.....	2d best Danish Ball.....	1 00
Hilas E. Craig.....	Groveport, O.....	3d best Danish Ball.....	50
Columbus Market Gardeners' Association.....	Columbus, O.....	Best Wakefield.....	2 00
Hilas E. Craig.....	Groveport, O.....	2d best Wakefield.....	1 00
A. H. Powell.....	Newark, O.....	3d best Wakefield.....	50
C. C. Breece.....	Delaware, O., R. D. 3.....	Best heaviest head of Cabbage.....	2 00
A. H. Powell.....	Newark, O.....	2d best heaviest head of Cabbage.....	1 00
Hilas E. Craig.....	Groveport, O.....	3d best heaviest head of Cabbage.....	50

CELERY AND PEPPERS.

Albert Pearce.....	Akron, O.....	Best White Plume Celery.....	\$2 00
Columbus Market Gardeners' Association.....	Columbus, O.....	2d best White Plume Celery.....	1 00
A. H. Powell.....	Newark, O.....	3d best White Plume Celery.....	50
Albert Pearce.....	Akron, O.....	Best Golden Self Blanching.....	2 00
J. T. Purks.....	Newark, O.....	2d best Golden Self Blanching.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best Golden Self Blanching.....	50
Albert Pearce.....	Akron, O.....	Best Giant Pascal.....	2 00
Columbus Market Gardeners' Association.....	Columbus, O.....	2d best Giant Pascal.....	1 00
A. H. Powell.....	Newark, O.....	3d best Giant Pascal.....	50
Albert Pearce.....	Akron, O.....	Best display five varieties.....	5 00
A. H. Powell.....	Newark, O.....	2d best display five varieties.....	3 00
C. S. Rice.....	Spencer, O.....	Best 12 largest Red Peppers.....	2 00
W. W. Bailey.....	Yellow Springs, O.....	2d best 12 largest Red Peppers.....	1 00
A. H. Powell.....	Newark, O.....	Best 12 largest Yellow Peppers.....	2 00
J. T. Purks.....	Newark, O.....	2d best 12 largest Yellow Peppers.....	1 00
W. W. Bailey.....	Yellow Springs, O.....	Best display on stalks.....	5 00
A. H. Powell.....	Newark, O.....	2d best display on stalks.....	3 00
Columbus Market Gardeners' Association.....	Columbus, O.....	3d best display on stalks.....	2 00

SQUASHES.

C. S. Rice.....	Spencer, O.....	Best Boston Marrow.....	\$3 00
J. T. Purks.....	Newark, O.....	2d best Boston Marrow.....	2 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
SQUASHES—Concluded.			
C. C. Breece	Delaware, O., R. D. 3	Best Cushaw	\$3 00
Elmer Husted	Husted, O.	2d best Cushaw	2 00
C. S. Rice	Spencer, O.	3d best Cushaw	1 00
J. L. Keckley	Marysville, O.	Best Essexhybrid	3 00
Columbus Market Gardeners' Association	Columbus, O.	Best Hubbard	3 00
A. H. Powell	Newark, O.	2d best Hubbard	2 00
F. M. Whipps	Peoria, O.	3d best Hubbard	1 00
J. L. Keckley	Marysville, O.	Best Red Hubbard	3 00
J. T. Purks	Newark, O.	2d best Red Hubbard	2 00
G. W. Wildman	Springfield, O., R. D. 3	3d best Red Hubbard	1 00
C. S. Rice	Spencer, O.	Best Yellow Crookneck	3 00
G. W. Wildman	Springfield, O., R. D. 8	2d best Yellow Crookneck	2 00
Columbus Market Gardeners' Association	Columbus, O.	3d best Yellow Crookneck	1 00
F. M. Whipps	Peoria, O.	Best Yellow Scallion	3 00
Nelson Doeber	West Mansfield, O., R. D.	2d best Yellow Scallion	2 00
W. W. Bailey	Yellow Springs, O.	3d best Yellow Scallion	1 00
A. H. Powell	Newark, O.	Best Ford Hook	3 00
J. T. Purks	Newark, O.	2d best Ford Hook	2 00
C. S. Rice	Spencer, O.	3d best Ford Hook	1 00
C. S. Rice	Spencer, O.	Best Pikes Peak	3 00
W. W. Bailey	Yellow Springs, O.	2d best Pikes Peak	2 00
J. T. Purks	Newark, O.	3d best Pikes Peak	1 00
G. W. Wildman	Springfield, O., R. D. 8	Best Marble Head	3 00
J. L. Keckley	Marysville, O.	2d best Marble Head	2 00
G. W. Wildman	Springfield, O., R. D. 8	Best Mammoth Chili	3 00
W. W. Bailey	Yellow Springs, O.	2d best Mammoth Chili	2 00
W. W. Bailey	Yellow Springs, O.	Best display gourds	3 00
G. W. Wildman	Springfield, O., R. D. 8	2d best display gourds	2 00
J. L. Keckley	Marysville, O.	3d best display gourds	1 00
G. W. Wildman	Springfield, O., R. D. 8	Heaviest Squash or Stock Pumpkin	3 00
Elmer Husted	Husted, O.	2d heaviest Squash or Stock Pumpkin	2 00
W. W. Bailey	Yellow Springs, O.	3d heaviest Squash or Stock Pumpkin	1 00
A. H. Powell	Newark, O.	Best display Squashes and Pumpkins, 10 varieties	10 00
C. S. Rice	Spencer, O.	2d best display Squashes and Pumpkins, 10 varieties	6 00
Hilas E. Craig	Groveport, O.	Best 3 Yellow Field Pumpkins	3 00
W. W. Bailey	Yellow Springs, O.	2d best 3 Yellow Field Pumpkins	2 00
J. T. Purks	Newark, O.	3d best 3 Yellow Field Pumpkins	1 00
Hilas E. Craig	Groveport, O.	Best 3 Sweet or Pie Pumpkins	3 00
Wilbur E. Morris	Urbana, O., R. D. 4	2d best 3 Sweet or Pie Pumpkins	2 00
W. W. Bailey	Yellow Springs, O.	3d best 3 Sweet or Pie Pumpkins	1 00
Hilas E. Craig	Groveport, O.	Heaviest Sweet Pumpkin	3 00
J. T. Purks	Newark, O.	2d heaviest Sweet Pumpkin	2 00
W. W. Bailey	Yellow Springs, O.	3d heaviest Sweet Pumpkin	1 00
WATERMELONS.			
Hilas E. Craig	Groveport, O.	Best Black Diamond	\$3 00
J. T. Purks	Newark, O.	Best Phinney's Early	3 00
Elmer Husted	Husted, O.	Best Rattlesnake	3 00
J. T. Purks	Newark, O.	Best Dark Icing	3 00
Hilas E. Craig	Groveport, O.	2d best Dark Icing	2 00
Elmer Husted	Husted, O.	Best Light Icing	3 00
F. M. Whipps	Peoria, O., R. D. 2	Best Citron	3 00
F. M. Whipps	Peoria, O., R. D. 2	Heaviest Watermelon	3 00
Nelson Doeber	West Mansfield, O., R. D.	2d heaviest Watermelon	2 00
MUSKMELONS.			
A. H. Powell	Newark, O.	Best Osage	\$2 00
A. H. Powell	Newark, O.	Best Montreal	2 00
J. T. Purks	Newark, O.	2d best Montreal	1 00
A. H. Powell	Newark, O.	Best Baltimore	2 00
J. T. Purks	Newark, O.	2d best Baltimore	1 00
G. W. Wildman	Springfield, O., R. D. 8	Best Banana	2 00
A. H. Powell	Newark, O.	2d best Banana	1 00
W. W. Bailey	Yellow Springs, O.	3d best Banana	50
J. T. Purks	Newark, O.	Best Tip Top	2 00
C. C. Breece	Delaware, O., R. D. 3	2d best Tip Top	1 00
A. H. Powell	Newark, O.	3d best Tip Top	50
G. W. Wildman	Springfield, O., R. D. 8	Best Hackensack	2 00
A. H. Powell	Newark, O.	2d best Hackensack	1 00
J. T. Purks	Newark, O.	Best Rockyford	2 00
F. M. Whipps	Peoria, O.	2d best Rockyford	1 00
A. H. Powell	Newark, O.	3d best Rockyford	50
G. W. Wildman	Springfield, O., R. D. 8	Best Emerald Gem	2 00
J. T. Purks	Newark, O.	2d best Emerald Gem	1 00
A. H. Powell	Newark, O.	3d best Emerald Gem	50
A. H. Powell	Newark, O.	Best display Muskmelons, 10 varieties	12 00

FARM PRODUCTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
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CUCUMBERS.

J. T. Purks.....	Newark, O.....	Best 12 Cucumbers.....	\$2 00
A. H. Powell.....	Newark, O.....	2d best 12 Cucumbers.....	1 00
C. S. Rice.....	Spencer, O.....	3d best 12 Cucumbers.....	50
J. T. Purks.....	Newark, O.....	Best display Cucumbers.....	3 00
J. L. Anderson & Son.....	Worthington, O.....	2d best display Cucumbers.....	2 00
A. H. Powell.....	Newark, O.....	3d best display Cucumbers.....	1 00

EGG PLANT.

Columbus Market Gardeners' Association.....	Columbus, O.....	Best 3 purple egg plants.....	\$2 00
A. H. Powell.....	Newark, O.....	2d best 3 purple egg plants.....	1 00
J. T. Purks.....	Newark, O.....	3d best purple egg plants.....	50

BEANS.

W. D. Whipps.....	Marion, O.....	Pest 2 quarts Lima Beans.....	\$2 00
J. T. Purks.....	Newark, O.....	2d best 2 quarts Lima Beans.....	1 00
Wilbur E. Morris.....	Urbana, O.....	3d best 2 quarts Lima Beans.....	50
Geo. W. Lee.....	Canal Winchester, O.....	Best 2 quarts Navy Beans.....	2 00
Wilbur E. Morris.....	Urbana, O., R. D. 4.....	2d best 2 quarts Navy Beans.....	1 00
Albert Pearce.....	Akron, O.....	3d best 2 quarts Navy Beans.....	50
F. M. Whipps.....	Peoria, O.....	Best 2 quarts Marrowfat Beans.....	2 00
W. D. Whipps.....	Marion, O.....	2d best 2 quarts Marrowfat Beans.....	1 00
Wilbur E. Morris.....	Urbana, O.....	3d best 2 quarts Marrowfat Beans.....	50
W. D. Whipps.....	Marion, O.....	Best 2 quarts Golden Wax Beans.....	2 00
J. L. Keckley.....	Marysville, O.....	2d best 2 quarts Golden Wax Beans.....	1 00
J. T. Purks.....	Newark, O.....	3d best 2 quarts Golden Wax Beans.....	50
J. T. Purks.....	Newark, O.....	Best 2 quarts White Kidney Beans.....	2 00
J. L. Keckley.....	Marysville, O.....	2d best 2 quarts White Kidney Beans.....	1 00
W. D. Whipps.....	Marion, O.....	3d best 2 quarts White Kidney Beans.....	50
J. L. Keckley.....	Marysville, O.....	Best 2 quarts Red Kidney Beans.....	2 00
W. D. Whipps.....	Marion, O.....	2d best 2 quarts Red Kidney Beans.....	1 00
J. T. Purks.....	Newark, O.....	3d best 2 quarts Red Kidney Beans.....	50
A. H. Powell.....	Newark, O.....	Best 2 quarts Red Valentine Beans.....	2 00
J. L. Keckley.....	Marysville, O.....	2d best 2 quarts Red Valentine Beans.....	1 00
Columbus Market Gardeners' Association.....	Columbus, O.....	Best display of Beans, 10 varieties.....	6 00
J. T. Purks.....	Newark, O.....	2d best display of Beans, 10 varieties.....	4 00
C. S. Rice.....	Spencer, O.....	3d best display of Beans, 10 varieties.....	2 00

DISPLAY OF VEGETABLES TO INCLUDE ARTICLES NAMED IN BOOKS 57 AND 58.

Columbus Market Gardeners' Association.....	Columbus, O.....	Best display.....	\$40 00
A. H. Powell.....	Newark, O.....	2d best display.....	30 00
W. W. Bailey.....	Yellow Springs, O.....	3d best display.....	20 00
J. L. Anderson & Son.....	Worthington, O.....	4th best display.....	15 00
C. C. Breece.....	Delaware, O., R. D. 3.....	5th best display.....	10 00

COUNTY EXHIBITS—FARM PRODUCTS.

J. L. Keckley.....	Marysville, O.....	Pest representative exhibit of farm products.....	\$350 00
G. W. Wildman.....	Springfield, O., R. D. 8.....	2d best representative exhibit of farm products.....	300 00
A. H. Powell.....	Newark, O.....	3d best representative exhibit of farm products.....	250 00
Hilas E. Craig.....	Groveport, O.....	4th best representative exhibit of farm products.....	200 00
F. M. Whipps.....	Peoria, O.....	5th best representative exhibit of farm products.....	175 00
C. S. Rice.....	Spencer, O.....	6th best representative exhibit of farm products.....	150 00
Albert Pearce.....	Akron, O.....	7th best representative exhibit of farm products.....	125 00
W. D. Whipps.....	Marion, O.....	8th best representative exhibit of farm products.....	100 00

DAIRY PRODUCTS.

HOME DAIRY BUTTER.

Name of Owner.	Postoffice.	Awards.	Score	Amount.
Mrs T. G. Ruff.....	Lancaster, O.....	Home dairy butter—best 10 lb. package.....	94	\$12 50

FARM PRODUCTS—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
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HOME DAIRY BUTTER—Concluded.

Paul P. Larkin.....	South Charleston, O.....	Home dairy butter—best 10 lb. package.....	94 \$12 50
J. H. Denham.....	New Concord, O.....	Best box of 5 single pound prints.....	96 5 90
Ernest Edwards.....	Lancaster, O.....	Best box of 5 single pound prints.....	95 4 70
Mrs. Frank Grant.....	Tonica, Illinois.....	Best box of 5 single pound prints.....	95 4 70
Mrs. T. G. Ruff.....	Lancaster, O.....	Best box of 5 single pound prints.....	94 3 55
Laura A. Larkins.....	South Charleston, O.....	Best box of 5 single pound prints.....	92 1 15

CREAMERY BUTTER.

Moore & Ross.....	Columbus, O.....	Best 20 pounds Creamery Butter.....	96 \$23 80
Pure Milk Co.....	Columbus, O.....	Best 20 pounds Creamery Butter.....	96 19 00
C. M. McConnell.....	Woodstock, O.....	Best 20 pounds Creamery Butter.....	95 19 00
The West Jefferson Creamery Co.....	Columbus, O.....	Best 20 pounds Creamery Butter.....	94 14 30
J. E. White.....	Greenfield, O.....	Best 20 pounds Creamery Butter.....	94 14 30
P. M. Hepler.....	Circleville, O.....	Best 20 pounds Creamery Butter.....	93 9 60

MILK AND CREAM FROM PRIVATE DAIRY HERD.

C. M. McConnell.....	Woodstock, O.....	Best 6 quarts bottle milk.....	\$10 00
H. P. Bailey.....	Sidney, O.....	2d best 6 quarts bottle milk.....	5 00
Mrs. H. Bieber.....	Delaware, O.....	Best 3 quarts bottled cream.....	10 00
Paul P. Larkin.....	South Charleston, O.....	2d best 3 quarts bottled cream.....	5 00

BEES AND HONEY.

Name of Owner.	Postoffice.	Awards.	Amount.
C. E. Leavitt.....	Mechanicsburg, O.....	Best display Comb Honey.....	\$15 00
Jessie Goodrich.....	Powell, O.....	2d best display Comb Honey.....	10 00
Jessie Goodrich.....	Powell, O.....	Best case, 24 sections, White Clover Honey.....	4 00
C. E. Leavitt.....	Mechanicsburg, O.....	2d best case, 24 sections, White Clover Honey.....	3 00
Jessie Goodrich.....	Powell, O.....	Best display extracted honey.....	15 00
C. E. Leavitt.....	Mechanicsburg, O.....	2d best display extracted honey.....	10 00
C. E. Leavitt.....	Mechanicsburg, O.....	Best 6 3-lb. jars extracted honey.....	3 00
Jessie Goodrich.....	Powell, O.....	2d best 6 3-lb. jars extracted honey.....	2 00
Jessie Goodrich.....	Powell, O.....	Best 6 1-lb. jars extracted honey.....	2 00
C. E. Leavitt.....	Mechanicsburg, O.....	2d best 6 1-lb. jars extracted honey.....	1 00

MAPLE PRODUCTS.

Name of Owner.	Postoffice.	Awards.	Amount.
W. C. Shellhammer.....	Greensprings, O.....	Best gallon Maple Syrup.....	\$3 00
Bartholomew & Shaw.....	Huntsburg, O.....	2d best gallon Maple Syrup.....	2 00
Jessie Goodrich.....	Powell, O.....	3d best gallon Maple Syrup.....	1 00
Bartholomew & Shaw.....	Huntsburg, O.....	Best 3 bricks Maple Sugar.....	3 00
Jessie Goodrich.....	Powell, O.....	2d best 3 bricks Maple Sugar.....	2 00
D. Gwynn Coyner.....	Lyndon, O.....	3d best bricks Maple Sugar.....	1 00
Jessie Goodrich.....	Powell, O.....	Best design in Maple Sugar.....	2 00
Bartholomew & Shaw.....	Huntsburg, O.....	2d best design in Maple Sugar.....	1 00
D. G. Coyner, O.....	Lyndon, O.....	Best 5 lbs. grained Maple Sugar.....	3 00
Bartholomew & Shaw.....	Huntsburg, O.....	2d best 5 lbs. grained Maple Sugar.....	2 00
Jessie Goodrich.....	Powell, O.....	3d best 5 lbs. grained Maple Sugar.....	1 00
Jessie Goodrich.....	Powell, O.....	Best display Maple Cream.....	3 00
Bartholomew & Shaw.....	Huntsburg, O.....	2d best display Maple Cream.....	2 00
D. G. Coyner.....	Lyndon, O.....	3d best display Maple Cream.....	1 00
Bartholomew & Shaw.....	Huntsburg, O.....	Best largest display of maple products from any one county.....	20 00
Jessie Goodrich.....	Powell, O.....	2d best largest display of maple products from any one county.....	15 00
D. G. Coyner.....	Lyndon, O.....	3d best largest display of maple products from any one county.....	10 00
Jessie Goodrich.....	Powell, O.....	Best largest display of maple products by dealer.....	Medal.
Jessie Goodrich.....	Powell, O.....	Best gallon of Sorghum Syrup.....	2 00

SEVENTH DEPARTMENT—HORTICULTURAL PRODUCTS.

W. G. FARNSWORTH, Member in Charge.

F. H. STEVENS Superintendent
 V. H. DAVIS Assistant Superintendent
 H. F. FRICKE Clerk

JUDGES.

BURR T. BELDEN, J. L. SCHILLER, L. R. TAFT.

Premiums offered, 1912 \$3,087 50
 Premiums paid, 1912 2,893 50
 Total number of entries, 1912—2,843.

Paid superintendents, judges, etc., 1912 \$250 55

Premiums offered, 1911 \$2,687 50
 Premiums paid, 1911 2,548 50
 Total number of entries, 1911—2,796.

Paid superintendents, judges, etc., 1911 \$168 00

Received from sale of floor space, 1910 \$18 15
 Premiums offered, 1910 2,035 50
 Premiums paid, 1910 1,526 00
 Total number of entries, 1910—1,206.

Paid superintendents, judges, etc., 1910 \$226 93

SUMMER, FALL AND WINTER APPLES.

Name of Owner.	Postoffice.	Awards.	Amount.
W. W. Farnsworth.....	Waterville, O.....	Best 3 varieties for summer market, grown north of Columbus.....	\$3 00
Wm. Miller.....	Port Clinton, O.....	2d best 3 varieties for summer market, grown north of Columbus.....	2 00
R. C. Hanlin.....	Newark, O.....	3d best 3 varieties for summer market, grown north of Columbus.....	1 00
John C. Hoffman.....	Lancaster, O., R. 1.....	Best 3 varieties grown for summer market, south of Columbus.....	3 00
J. P. Eaton.....	Proctorville, O.....	2d best 3 varieties, grown for summer market, south of Columbus.....	2 00
H. B. Mauck.....	Proctorville, O.....	3d best 3 varieties, grown for summer market, south of Columbus.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best 3 varieties of fall, for market, grown north of Columbus.....	3 00
Mabel Hutchinson.....	Clyde, O.....	2d best 3 varieties of fall, for market, grown north of Columbus.....	2 00
Wilber E. Morris.....	Urbana, O., R. 4.....	3d best 3 varieties of fall, for market, grown north of Columbus.....	1 00
Horace J. Simons.....	Gallipolis, O.....	Best 3 varieties of fall, for market, grown south of Columbus.....	3 00
E. G. Cox.....	Proctorville, O.....	2d best 3 varieties of fall, for market, grown south of Columbus.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best 3 varieties of fall, for market, grown south of Columbus.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best 6 varieties of winter, for market, grown north of Columbus.....	5 00
Mabel Hutchinson.....	Clyde, O.....	2d best 6 varieties of winter, for market, grown north of Columbus.....	3 00
E. A. Brenneman.....	Camp Chase, O.....	3d best 6 varieties of winter, for market, grown north of Columbus.....	2 00
E. G. Cox.....	Proctorville, O.....	Best 6 varieties of winter, for market, grown south of Columbus.....	5 00
Ernest J. Riggs.....	Raccoon Island, O.....	2d best 6 varieties of winter, for market, grown south of Columbus.....	3 00
U. T. Cox.....	Proctorville, O.....	3d best 6 varieties of winter, for market, grown south of Columbus.....	2 00
W. W. Farnsworth.....	Waterville, O.....	Best collection, 12 varieties, summer, fall and winter, for market, grown north of Columbus.....	8 00
Fred Hutchinson.....	Clyde, O.....	2d best collection, 12 varieties, summer, fall and winter, for market, grown north of Columbus.....	5 00
H. Burkholder.....	Clyde, O.....	3d best collection, 12 varieties, summer, fall and winter, for market, grown north of Columbus.....	3 00

HORTICULTURAL PRODUCTS—Continued.
SUMMER, FALL AND WINTER APPLES—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
E. G. Cox.....	Proctorville, O.....	Best collection, 12 varieties, summer, fall and winter, for market, grown south of Columbus.....	\$8 00
U. T. Cox.....	Proctorville, O.....	2d best collection, 12 varieties, summer, fall and winter, for market, grown south of Columbus.....	5 00
J. P. Eaton.....	Proctorville, O.....	3d best collection, 12 varieties, summer, fall and winter, for market, grown south of Columbus.....	3 00
C. L. Freed.....	Lancaster, O., R. 1.....	Best summer dessert, 1 variety.....	2 00
J. P. Eaton.....	Proctorville, O.....	2d best summer dessert, 1 variety.....	1 00
Horace J. Simmons.....	Gallipolis, O.....	Best fall dessert, 1 variety.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best fall dessert, 1 variety.....	1 00
Ernest J. Riggs.....	Raccoon Island, O.....	Best winter dessert, 1 variety.....	2 00
E. G. Cox.....	Proctorville, O.....	2d best winter dessert, 1 variety.....	1 00
E. G. Cox.....	Proctorville, O.....	Best collection summer, fall and winter, for dessert and culinary purposes, grown south of Columbus.....	6 00
U. T. Cox.....	Proctorville, O.....	2d best collection summer, fall and winter, for dessert and culinary purposes, grown south of Columbus.....	4 00
Ernest J. Riggs.....	Raccoon Island, O.....	3d best collection, summer, fall and winter, for dessert and culinary purposes, grown south of Columbus.....	2 00
M. I. Shiveley.....	Chillicothe, O.....	Best one variety of fall.....	2 00
R. C. Hanlin.....	Newark, O.....	2d best one variety of fall.....	1 00
U. T. Cox.....	Proctorville, O.....	Best variety of winter.....	2 00
E. G. Cox.....	Proctorville, O.....	2d best variety of winter.....	1 00
E. G. Cox.....	Proctorville, O.....	Best collection, 6 varieties, summer, fall and winter.....	6 00
U. T. Cox.....	Proctorville, O.....	2d best collection, 6 varieties, summer, fall and winter.....	4 00
Ernest J. Riggs.....	Raccoon Island, O.....	3d best collection, 6 varieties, summer, fall and winter.....	2 00
W. W. Farnsworth.....	Waterville, O.....	Best display, 25 varieties, summer, fall and winter, grown north of Columbus, dessert, etc.....	20 00
H. Burkholder.....	Clyde, O.....	2d best display, 25 varieties, summer, fall and winter, grown north of Columbus, dessert, etc.....	15 00
Fred Hutchinson.....	Clyde, O.....	3d best display, 25 varieties, summer, fall and winter, grown north of Columbus, dessert, etc.....	10 00
U. T. Cox.....	Proctorville, O.....	Best display, 25 varieties, summer, fall and winter, grown south of Columbus, dessert, etc.....	20 00
E. G. Cox.....	Proctorville, O.....	2d best display, 25 varieties, summer, fall and winter, grown south of Columbus, dessert, etc.....	15 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	3d best display, 25 varieties, summer, fall and winter, grown south of Columbus, dessert, etc.....	10 00
Ernest J. Riggs.....	Raccoon Island, O.....	Best bushel box of apples, fruit, package, etc.....	5 00
W. W. Farnsworth.....	Waterville, O.....	2d best bushel box of apples, fruit, package, etc.....	3 00
U. T. Cox.....	Proctorville, O.....	3d best bushel box of apples, fruit, package, etc.....	2 00
W. W. Farnsworth.....	Waterville, O.....	Best display of 20 trays, size 11½ by 18 inches deep.....	20 00
Fred Seeling.....	Chillicothe, O.....	2d best display of 20 trays, size 11½ by 8 inches deep.....	15 00
J. P. Eaton.....	Proctorville, O.....	3d best display of 20 trays, size 11½ by 18 inches deep.....	10 00
U. T. Cox.....	Proctorville, O.....	4th best display of 20 trays, size 11½ by 18 inches deep.....	5 00

PLATE APPLES.
SUMMER AND FALL.

Name of Owner.	Postoffice.	Awards.	Amount.
W. W. Farnsworth.....	Waterville, O.....	Best Alexander.....	\$3 00
C. W. Counter.....	Toledo, O.....	2d best Alexander.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Alexander.....	1 00

HORTICULTURAL PRODUCTS—Continued.
PLATE APPLES—SUMMER AND FALL—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
J. P. Eaton.....	Proctorville, O.....	Best Benoni.....	\$3 00
Ernest J. Riggs.....	Raccoon Island, O.....	2d best Benoni.....	2 00
L. D. Eaton.....	Proctorville, O.....	3d best Benoni.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Cayuga Red Streak.....	3 00
Moses A. Hagley.....	Xenia, O.....	2d best Cayuga Red Streak.....	2 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	3d best Cayuga Red Streak.....	1 00
Geo. C. Hoffman.....	Lancaster, O., R. 1.....	Best Schenango Strawberry.....	3 00
H. H. Herron.....	New Marshfield, O.....	2d best Schenango Strawberry.....	2 00
W. W. Farnsworth.....	Waterville, O.....	3d best Schenango Strawberry.....	1 00
Fred Seeling.....	Chillicothe, O.....	Best Fall Pippin.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Fall Pippin.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Fall Pippin.....	1 00
C. W. Counter.....	Toledo, O.....	Best Fannie.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Fannie.....	2 00
W. W. Farnsworth.....	Waterville, O.....	Best Jeffries.....	5 00
C. W. Counter.....	Toledo, O.....	2d best Jeffries.....	2 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	3d best Jeffries.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Gravenstein.....	3 00
C. W. Counter.....	Toledo, O.....	2d best Gravenstein.....	2 00
Fred Hutchinson.....	Clyde, O.....	3d best Gravenstein.....	1 00
Geo. C. Hoffman.....	Lancaster, O., R. 1.....	Best Lowell.....	3 00
C. L. Freed.....	Lancaster, O.....	2d best Lowell.....	2 00
Fred Hutchinson.....	Clyde, O.....	3d best Lowell.....	1 00
H. Burkholder.....	Clyde, O.....	Best Maiden's Blush.....	3 00
U. T. Cox.....	Proctorville, O.....	2d best Maiden's Blush.....	2 00
Geo. C. Hoffman.....	Lancaster, O.....	3d best Maiden's Blush.....	1 00
R. C. Hanlin.....	Newark, O.....	Best Ohio Nonpareil.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Ohio Nonpareil.....	2 00
Geo. C. Hoffman.....	Lancaster, O.....	3d best Ohio Nonpareil.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Porter.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Porter.....	2 00
Mabel Hutchinson.....	Clyde, O.....	3d best Porter.....	1 00
E. G. Cox.....	Proctorville, O.....	Best Red Astrachen.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Astrachen.....	2 00
C. W. Counter.....	Toledo, O.....	3d best Astrachen.....	1 00
R. C. Hanlin.....	Newark, O.....	Best Sweet Bough.....	8 00
H. Burkholder.....	Clyde, O.....	2d best Sweet Bough.....	2 00
Mabel Hutchinson.....	Clyde, O.....	3d best Sweet Bough.....	1 00
Horace J. Simons.....	Gallipolis, O.....	Best Wealthy.....	3 00
Carson Bros.....	Middleport, O.....	2d best Wealthy.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Wealthy.....	1 00
R. C. Hanlin.....	Newark, O.....	Best Yellow Transparent.....	3 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Yellow Transparent.....	2 00
W. W. Farnsworth.....	Waterville, O.....	3d best Yellow Transparent.....	1 00
W. H. West.....	Chillicothe, O.....	Best new seedling, if approved by the committee.....	2 00
M. I. Shively.....	Chillicothe, O.....	2d best new seedling, if approved by the committee.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Duchess of Oldenburg.....	5 00
Moses A. Hagler.....	Xenia, O.....	2d best Duchess of Oldenburg.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Duchess of Oldenburg.....	1 00

WINTER PLATE APPLES.

Name of Owner	Postoffice.	Awards.	Amount.
W. W. Farnsworth.....	Waterville, O.....	Best Bailey's Sweet.....	\$3 00
C. W. Counter.....	Toledo, O.....	2d best Bailey's Sweet.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Bailey's Sweet.....	1 00
R. C. Hanlin.....	Newark, O.....	Best Baltimore.....	3 00
H. H. Herron.....	New Marshfield, O.....	2d best Baltimore.....	2 00
Wm. Miller.....	Port Clinton, O.....	3d best Baltimore.....	1 00
Fred Seeling.....	Chillicothe, O.....	Best Banana.....	3 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Banana.....	2 00
M. I. Shively.....	Chillicothe, O.....	3d best Banana.....	1 00
Geo. C. Hoffman.....	Lancaster, O.....	Best Baldwin.....	3 00
Mabel Hutchinson.....	Clyde, O.....	2d best Baldwin.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Baldwin.....	1 00
Mabel Hutchinson.....	Clyde, O.....	Best Belmont.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Belmont.....	2 00
J. A. Stokes & Son.....	Fremont, O.....	3d best Belmont.....	1 00
Horace J. Simons.....	Gallipolis, O.....	Best Ben Davis.....	3 00
L. D. Eaton.....	Proctorville, O.....	2d best Ben Davis.....	2 00
E. G. Cox.....	Proctorville, O.....	3d best Ben Davis.....	1 00
E. A. Brenneman.....	Camp Chase, O.....	Best Delicious.....	3 00
Fred Hutchinson.....	Clyde, O.....	Best Dominic.....	3 00
Mabel Hutchinson.....	Clyde, O.....	2d best Dominic.....	2 00
W. W. Farnsworth.....	Waterville, O.....	3d best Dominic.....	1 00

HORTICULTURAL PRODUCTS—Continued.

WINTER PLATE APPLES—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
E. G. Cox	Proctorville, O.	Best Ensee	\$3 00
Geo. C. Unternaker	Newark, O.	2d best Ensee	2 00
R. C. Hanlin	Newark, O.	3d best Ensee	1 00
H. Burkholder	Clyde, O.	Best Fallawater	3 00
Colville Bros.	St. Louisville, O.	2d best Fallawater	2 00
Mabel Hutchinson	Clyde, O.	3d best Fallawater	1 00
H. Burkholder	Clyde, O.	Best Fameuse	3 00
Mabel Hutchinson	Clyde, O.	2d best Fameuse	2 00
J. A. Stokes & Son	Fremont, O.	3d best Fameuse	1 00
Ernest J. Riggs	Raccoon Island, O.	Best Gano	3 00
Carson Bros.	Middleport, O.	2d best Gano	2 00
E. G. Cox	Proctorville, O.	3d best Gano	1 00
Moses A. Hagler	Xenia, O.	Best Greenville	3 00
W. W. Farnsworth	Waterville, O.	2d best Greenville	2 00
H. C. Kiefaber	Frankfort, O., R. 1	3d best Greenville	1 00
Carson Bros.	Middleport, O.	Best Grimes' Golden	3 00
Ernest J. Riggs	Raccoon Island, O.	2d best Grimes' Golden	2 00
Horace J. Simons	Gallipolis, O.	3d best Grimes' Golden	1 00
W. W. Farnsworth	Waterville, O.	Best Hendrick's Sweet	3 00
C. W. Counter	Toledo, O. (Nicholas Bdg)	2d best Hendricks' Sweet	2 00
Colville Bros.	St. Louisville, O.	Best Hubbardson	3 00
John C. Hoffman	Lancaster, O.	2d best Hubbardson	2 00
W. W. Farnsworth	Waterville, O.	3d best Hubbardson	1 00
E. G. Cox	Proctorville, O.	Best Jonathan	3 00
E. A. Brennenman	Camp Chase, O.	2d best Jonathan	2 00
U. T. Cox	Proctorville, O.	3d best Jonathan	1 00
M. Luther Peterson	Frankfort, O.	2d best King David	2 00
S. R. Gill & Sons	Port Clinton, O.	3d best King David	1 00
Fred Seeling	Chillicothe, O.	Best King (Tompkins Co.)	3 00
H. C. Kiefaber	Frankfort, O.	2d best King (Tompkins Co.)	2 00
W. W. Farnsworth	Waterville, O.	3d best King (Tompkins Co.)	1 00
Ernest J. Riggs	Raccoon Island, O.	Best Mammoth Black Twig	3 00
E. G. Cox	Proctorville, O.	2d best Mammoth Black Twig	2 00
Carson Bros.	Middleport, O.	3d best Mammoth Black Twig	1 00
W. W. Farnsworth	Waterville, O.	Best McIntosh	3 00
Carson Bros.	Middleport, O.	Best Northern Spy	3 00
Harry Bookwater	Hallsville, O.	2d best Northern Spy	2 00
Fred Seeling	Chillicothe, O.	3d best Northern Spy	1 00
Colville Bros.	St. Louisville, O.	Best Paradise Winter Sweet	3 00
Carson Bros.	Middleport, O.	2d best Paradise Winter Sweet	2 00
John C. Hoffman	Lancaster, O.	3d best Paradise Winter Sweet	1 00
W. W. Farnsworth	Waterville, O.	Best Peck's Pleasant	3 00
C. W. Counter	Toledo, O. (Nicholas Bldg)	2d best Peck's Pleasant	2 00
A. E. Johnson	Port Clinton, O.	3d best Peck's Pleasant	1 00
Colville Bros.	St. Louisville, O.	Best Talman Sweet	3 00
H. Burkholder	Clyde, O.	2d best Talman Sweet	2 00
W. W. Farnsworth	Waterville, O.	3d best Talman Sweet	1 00
U. T. Cox	Proctorville, O.	Best Wagener	3 00
Colville Bros.	St. Louisville, O.	2d best Wagener	2 00
E. G. Cox	Proctorville, O.	3d best Wagener	1 00
J. J. Ropp	Canal Winchester, O.	Best White pippin	3 00
H. Burkholder	Clyde, O.	2d best White Pippin	2 00
Fred Hutchinson	Clyde, O.	3d best White Pippin	1 00
Carson Bros.	Middleport, O.	Best Willow Twig	3 00
Horace J. Simons	Gallipolis, O.	2d best Willow Twig	2 00
Ernest J. Riggs	Raccoon Island, O.	Best Wine Sap	3 00
H. C. Kiefaber	Frankfort, O.	2d best Wine Sap	2 00
J. A. Stokes & Son	Fremont, O.	3d best Wine Sap	1 00
Fred Seeling	Chillicothe, O.	Best Wolf River	3 00
U. T. Cox	Proctorville, O.	2d best Wolf River	2 00
H. C. Kiefaber	Frankfort, O.	3d best Wolf River	1 00
E. G. Cox	Proctorville, O.	Best York Imperial	3 00
M. Luther Peterson	Frankfort, O.	2d best York Imperial	2 00
Fred Seeling	Chillicothe, O.	3d best York Imperial	1 00

APPLES IN SINGLE TRAYS—SUMMER AND FALL.

Name of Owner.	Postoffice.	Awards.	Amount.
C. W. Counter	Toledo, O.	Best single tray Duchess of Oldenburg	\$5 00
W. W. Farnsworth	Waterville, O.	2d best single tray Duchess of Oldenburg	3 00
Moses A. Hagler	Xenia, O.	3d best single tray Duchess of Oldenburg	2 00
L. W. Counter	Toledo, O.	Best Schenango Strawberry	5 00
W. W. Farnsworth	Waterville, O.	2d best Schenango Strawberry	3 00
H. H. Herron	New Marshfield, O.	3d best Schenango Strawberry	2 00
Moses A. Hagler	Xenia, O.	Best Maiden's Blush	5 00
L. D. Eaton	Proctorville, O.	2d best Maiden's Blush	3 00

HORTICULTURAL PRODUCTS—Continued.

APPLES IN SINGLE TRAYS—SUMMER AND FALL—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
W. W. Farnsworth.....	Waterville, O.....	3d best Maiden's Blush.....	\$2 00
Mabel Hutchinson.....	Clyde, O.....	Best Wealthy.....	5 00
U. T. Cox.....	Proctorville, O.....	2d best Wealthy.....	3 00
H. H. Herion.....	New Marshfield, O.....	3d best Wealthy.....	2 00

WINTER.

Name of Owner.	Postoffice.	Awards.	Amount.
W. W. Farnsworth.....	Waterville, O.....	Best Baldwin, single tray.....	\$5 00
H. Burkholder.....	Clyde, O.....	2d best Baldwin, single tray.....	3 00
U. T. Cox.....	Proctorville, O.....	3d best Baldwin, single tray.....	2 00
U. T. Cox.....	Proctorville, O.....	Best Ben Davis, single tray.....	5 00
Fred Hutchinson.....	Clyde, O.....	2d best Ben Davis, single tray.....	2 00
Mabel Hutchinson.....	Clyde, O.....	3d best Ben Davis, single tray.....	2 00
H. B. Mauck.....	Proctorville, O.....	Best Grimes' Golden, single tray.....	5 00
Ernest J. Riggs.....	Raccoon Island, O.....	2d best Grimes' Golden, single tray.....	3 00
C. L. Freed.....	Lancaster, O.....	3d best Grimes' Golden, single tray.....	2 00
U. T. Cox.....	Proctorville, O.....	Best Jonathan, single tray.....	5 00
Ernest J. Riggs.....	Raccoon Island, O.....	2d best Jonathan, single tray.....	3 00
Fred Hutchinson.....	Clyde, O.....	3d best Jonathan, single tray.....	2 00
H. Burkholder.....	Clyde, O.....	Best Rhode Island Greening, single tray.....	5 00
Ernest J. Riggs.....	Raccoon Island, O.....	2d best Rhode Island Greening, single tray.....	3 00
W. W. Farnsworth.....	Waterville, O.....	3d best Rhode Island Greening, single tray.....	2 00
Mabel Hutchinson.....	Clyde, O.....	Best Rambo, single tray.....	5 00
Colville Bros.....	St. Louisville, O.....	2d best Rambo, single tray.....	3 00
Fred Hutchinson.....	Clyde, O.....	3d best Rambo, single tray.....	2 00
L. D. Eaton.....	Proctorville, O.....	Best New Seedling.....	2 00
C. S. Gilliland.....	Pomeroy O.....	2d best New Seedling.....	1 00

CRAB APPLES.

Name of Owner.	Postoffice.	Awards.	Amount.
H. C. Kiefaber.....	Frankfort, O.....	Best Quaker Beauty.....	\$2 00
Mabel Hutchinson.....	Clyde, O.....	2d best Quaker Beauty.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Transcendent.....	2 00
Mabel Hutchinson.....	Clyde, O.....	2d best Transcendent.....	1 00
Moses A. Hagler.....	Xenia, O.....	Best Whitney's No. 20.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Whitney's No. 20.....	1 00
Carson Bros.....	Middleport, O.....	Best Hyslop.....	2 00
Fred Hutchinson.....	Clyde, O.....	2d best Hyslop.....	1 00
H. C. Kiefaber.....	Frankfort, O.....	Best display of 5 varieties.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best display of 5 varieties.....	1 50
L. D. Eaton.....	Proctorville, O.....	Best fruit display.....	60 00
E. A. Brennehan.....	Camp Chase, O.....	2d best fruit display.....	45 00
W. W. Farnsworth.....	Waterville, O.....	3d best fruit display.....	30 00
C. W. Counter.....	Toledo, O.....	4th best fruit display.....	20 00
U. T. Cox.....	Proctorville, O.....	5th best fruit display.....	15 00

PEACHES, QUINCES AND PLUMS.

PEACHES.

Name of Owner.	Postoffice.	Awards.	Amount.
Wm. Miller.....	Port Clinton, O.....	Best 5 variety, dessert and culinary qualities considered.....	\$5 00
S. R. Gill & Son.....	Port Clinton, O.....	2d best 5 variety, dessert and culinary qualities considered.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best 5 variety, dessert and culinary quality considered.....	2 00
Wm. Miller.....	Port Clinton, O.....	Best 5 variety, market quality considered.....	5 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best 5 variety, market quality considered.....	3 00

HORTICULTURAL PRODUCTS—Continued.

PEACHES—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
S. R. Gill & Son.....	Port Clinton, O.....	3d best 5 variety, market quality considered.....	\$2 00
Miller & Gill.....	Port Clinton, O.....	Best collection of 8 varieties, dessert, etc., considered.....	7 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best collection of 8 varieties, dessert, etc., considered.....	5 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best collection of 12 varieties, dessert, etc., considered.....	10 00
Miller & Gill.....	Port Clinton, O.....	2d best collection of 12 varieties dessert, etc., considered.....	7 00
Plate of each of the following varieties:			
H. C. Kiefaber.....	Frankfort, O., R. 1.....	Best Banner.....	3 00
M. I. Shively.....	Chillicothe, O.....	2d best Banner.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	Best Beer's Smock.....	3 00
M. I. Shively.....	Chillicothe, O.....	2d best Beer's Smock.....	2 00
U. T. Cox.....	Proctorville, O.....	3d best Beer's Smock.....	1 00
Wm. Miller.....	Port Clinton, O.....	Best Belle of Georgia.....	3 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Belle of Georgia.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Belle of Georgia.....	1 00
Wm. Miller.....	Port Clinton, O.....	Best Briner.....	3 00
S. R. Gill & Son.....	Port Clinton, O.....	2d best Briner.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Briner.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Chair's Choice.....	3 00
J. T. Ropp.....	Canal Winchester, O.....	2d best Chair's Choice.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Carman.....	3 00
Wm. Miller.....	Port Clinton, O.....	2d best Carman.....	2 00
John C. Undertaker.....	Newark, O.....	3d best Carman.....	1 00
Wm. Miller.....	Port Clinton, O.....	Best Champion.....	3 00
M. I. Shively.....	Chillicothe, O.....	2d best Champion.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	3d best Champion.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Captain Ede.....	3 00
S. R. Gill & Son.....	Port Clinton, O.....	Best Crawford's Early.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Crawford's Early.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	Best Crawford's Late.....	3 00
M. I. Shively.....	Chillicothe, O.....	2d best Crawford's Late.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Crawford's Late.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Crosby.....	3 00
Jno. C. Undertaker.....	Newark, O.....	2d best Crosby.....	2 00
M. I. Shively.....	Chillicothe, O.....	3d best Crosby.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Early Toledo.....	3 00
J. L. Ropp.....	Canal Winchester, O.....	Best Elberta.....	3 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Elberta.....	2 00
H. H. Herron.....	New Marshfield, O.....	3d best Elberta.....	1 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	Best Foster.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Foster.....	2 00
Wm. Miller.....	Port Clinton, O.....	3d best Foster.....	1 00
Wm. Miller.....	Port Clinton, O.....	Best Fitzgerald.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Fitzgerald.....	2 00
Burt Lockwood.....	Port Clinton, O.....	Best Graves.....	3 00
Wm. Miller.....	Port Clinton, O.....	2d best Graves.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Graves.....	1 00
H. C. Kiefaber.....	Frankfort, O.....	Best Kalamazoo.....	3 00
Wm. Miller.....	Port Clinton, O.....	2d best Kalamazoo.....	2 00
M. I. Shively.....	Chillicothe, O.....	Best Lemon Tree.....	3 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Lemon Tree.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Lemon Tree.....	1 00
H. C. Kiefaber.....	Frankfort, O.....	Best Mountain Rose.....	3 00
S. R. Gill & Son.....	Port Clinton, O.....	2d best Mountain Rose.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	Best New Prolific.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Niagara.....	3 00
S. R. Gill & Son.....	Port Clinton, O.....	2d best Niagara.....	2 00
Wm. Miller.....	Port Clinton, O.....	3d best Niagara.....	1 00
S. R. Gill & Son.....	Port Clinton, O.....	Best Orange.....	3 00
John C. Undertaker.....	Newark, O., R. 6.....	Best Old Mixon Free.....	3 00
U. T. Cox.....	Proctorville, O.....	2d best Old Mixon Free.....	2 00
M. I. Shively.....	Chillicothe, O.....	3d best Old Mixon Free.....	1 00
M. I. Shively.....	Chillicothe, O.....	Best Smock Free.....	3 00
U. T. Cox.....	Proctorville, O.....	2d best Smock Free.....	2 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	3d best Smock Free.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Stephens.....	3 00
Jno. C. Undertaker.....	Newark, O., R. 6.....	2d best Stephens.....	2 00
U. T. Cox.....	Proctorville, O.....	Best Stump.....	3 00
Jno. C. Undertaker.....	Newark, O.....	2d best Stump.....	2 00
Burt Lockwood.....	Port Clinton, O.....	Best St. John.....	3 00
U. T. Cox.....	Proctorville, O.....	2d best St. John.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best St. John.....	1 00

HORTICULTURAL PRODUCTS—Continued.

SINGLE TRAY PEACHES.

Name of Owner.	Postoffice.	Awards.	Amount.
J. J. Ropp.....	Canal Winchester, O.....	Best Champion.....	\$5 00
J. L. Ropp.....	Canal Winchester, O.....	Best Elberta.....	5 00
U. T. Cox.....	Proctorville, O.....	2d best Elberta.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Elberta.....	2 00

QUINCES.

Name of Owner.	Postoffice.	Awards.	Amount.
Harry Bookwater.....	Hallsville, O.....	Best Meech.....	\$2 00
E. G. Cox.....	Proctorville, O.....	2d best Meech.....	1 00
W. H. Ortman.....	Hallsville, O.....	Best Rea's Mammoth.....	2 00
Harry Bookwater.....	Hallsville, O.....	2d best Rea's Mammoth.....	1 00
U. T. Cox.....	Proctorville, O.....	Best peck Quinces.....	2 00
Harry Bookwater.....	Hallsville, O.....	2d best peck Quinces.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Orange.....	2 00
Harry Bookwater.....	Hallsville, O.....	2d best Orange.....	1 00

PLUMS.

Name of Owner.	Postoffice.	Awards.	Amount.
U. T. Cox.....	Proctorville, O.....	Best 5 varieties, dessert and culinary qualities considered.....	\$5 00
E. G. Cox.....	Proctorville, O.....	2d best 5 varieties, dessert and culinary qualities considered.....	3 00
W. W. Farnsworth.....	Waterville, O.....	3d best 5 varieties, dessert and culinary qualities considered.....	2 00
U. T. Cox.....	Proctorville, O.....	Best 5 varieties, market qualities considered.....	5 00
W. W. Farnsworth.....	Waterville, O.....	2d best 5 varieties, market qualities considered.....	3 00
E. G. Cox.....	Proctorville, O.....	3d best 5 varieties, market qualities considered.....	2 00
W. W. Farnsworth.....	Waterville, O.....	Best collection of 10 varieties, dessert, etc., considered.....	8 00
U. T. Cox.....	Proctorville, O.....	2d best collection 10 varieties, dessert, etc., considered.....	5 00
S. R. Gill & Son.....	Port Clinton, O.....	3d best collection of 10 varieties, dessert, etc., considered.....	3 00

PLATE OF PLUMS.

Name of Owner.	Postoffice.	Awards.	Amount.
H. Burkholder.....	Clyde, O.....	Best Abundance.....	\$2 00
Fred Hutchinson.....	Clyde, O.....	2d best Abundance.....	1 00
U. T. Cox.....	Proctorville, O.....	Best Arch Duke.....	2 00
E. G. Cox.....	Proctorville, O.....	2d best Arch.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Bradshaw.....	2 00
Mabel Hutchinson.....	Clyde, O.....	2d best Bradshaw.....	1 00
H. C. Kiefaber.....	Frankfort, O., R. 1.....	Best Burbank.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best Burbank.....	1 00
S. R. Gill & Son.....	Port Clinton, O.....	Best Coe's Golden Drops.....	2 00
U. T. Cox.....	Proctorville, O.....	Best Pellemburg.....	2 00
E. G. Cox.....	Proctorville, O.....	2d best Pellemburg.....	1 00
R. C. Hanlin.....	Newark, O.....	Best French Damson.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best French Damson.....	1 00
M. Luther Peterson.....	Frankfort, O.....	Best Grand Duke.....	2 00
U. T. Cox.....	Proctorville, O.....	2d best Grand Duke.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Gueii.....	2 00
J. L. Ropp.....	Canal Winchester, O.....	2d best Gueii.....	1 00
M. Luther Peterson.....	Frankfort, O.....	Best German Prune.....	2 00
H. H. Herron.....	New Marshfield, O.....	2d best German Prune.....	1 00
H. Burkholder.....	Clyde, O.....	Best Lombard.....	2 00
H. C. Kiefaber.....	Frankfort, O.....	2d best Lombard.....	1 00
E. A. Brennenman.....	Camp Chase, O.....	Best Monarch.....	2 00

HORTICULTURAL PRODUCTS—Continued.

PLATE OF PLUMS—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
H. Burkholder	Clyde, O.	2d best Monarch	\$1 00
Mrs. T. S. Johnson	Port Clinton, O.	Best Moore's Arctic	2 00
E. G. Cox	Proctorville, O.	2d best Moore's Arctic	1 00
E. G. Cox	Proctorville, O.	Best Pond's Seedling	2 00
U. T. Cox	Proctorville, O.	2d best Pond's Seedling	1 00
H. C. Kiefaber	Frankfort, O., R. 1	Best Reine Claude	2 00
E. A. Brenneman	Camp Chase, O.	2d best Reine Claude	1 00
E. A. Brenneman	Camp Chase, O.	Best Red June	2 00
E. G. Cox	Proctorville, O.	Best Richland	2 00
H. C. Kiefaber	Frankfort, O.	2d best Richland	1 00
E. A. Brenneman	Camp Chase, O.	Best Shropshire	2 00
Jno. C. Unternaker	Newark, O., R. 6	2d best Shropshire	1 00
E. G. Cox	Proctorville, O.	Best Stanton	2 00
H. C. Kiefaber	Frankfort, O.	2d best Stanton	1 00
J. T. Ropp	Canal Winchester, O.	Best Union Purple	2 00
Jno. C. Gill & Son	Port Clinton, O.	2d best Union Purple	1 00
E. A. Brenneman	Camp Chase, O.	Best Wickson	2 00
Fred Hutchinson	Clyde, O.	2d best Wickson	1 00
S. R. Gill & Son	Port Clinton, O.	Best Yellow Egg	2 00
W. W. Farnsworth	Waterville, O.	2d best Yellow Egg	1 00

PEARS.

Name of Owner.	Postoffice.	Awards.	Amount.
W. W. Farnsworth	Waterville, O.	Best 3 varieties summer	\$3 00
C. W. Counter	Toledo, O.	2d best 3 varieties summer	2 00
U. T. Cox	Proctorville, O.	3d best 3 varieties summer	1 00
W. W. Farnsworth	Waterville, O.	Best 3 varieties fall	3 00
C. W. Counter	Toledo, O.	2d best 3 varieties fall	2 00
H. Burkholder	Clyde, O.	3d best 3 varieties fall	1 00
H. Burkholder	Clyde, O.	Best 3 varieties winter	3 00
C. W. Counter	Toledo, O.	2d best 3 varieties winter	2 00
W. W. Farnsworth	Waterville, O.	3d best 3 varieties winter	1 00
W. W. Farnsworth	Waterville, O.	Best 5 varieties, dessert and culinary qualities considered	5 00
C. W. Counter	Toledo, O.	2d best 5 varieties, dessert and culinary qualities considered	3 00
Mrs. T. S. Johnson	Port Clinton, O.	3d best 5 varieties, dessert and culinary qualities considered	2 00
C. W. Counter	Toledo, O.	Best 5 varieties, market qualities considered	5 00
W. W. Farnsworth	Waterville, O.	2d best 5 varieties, market qualities considered	3 00
Wm. Miller	Port Clinton, O.	3d best 5 varieties, market qualities considered	2 00
W. W. Farnsworth	Waterville, O.	Best collection of 10 varieties, dessert, etc., considered	12 00
C. W. Counter	Toledo, O.	2d best collection of 10 varieties, dessert, etc., considered	8 00
Wm. Miller	Port Clinton, O.	3d best collection of 10 varieties, dessert, etc., considered	5 00
Fred Hutchinson	Clyde, O.	Best single tray Bartlett	5 00
Mrs. T. S. Johnson	Port Clinton, O.	2d best single tray Bartlett	3 00
Wm. Miller	Port Clinton, O.	3d best single tray Bartlett	2 00
H. Burkholder	Clyde, O.	Best single tray Duchess	5 00
Mabel Hutchinson	Clyde, O.	2d best single tray Duchess	3 00
Fred Hutchinson	Clyde, O.	3d best single tray Duchess	2 00
C. W. Counter	Toledo, O., (Nicholas Bldg.)	Best single tray Anjou	5 00
W. W. Farnsworth	Waterville, O.	2d best single tray Anjou	3 00
Wm. Miller	Port Clinton, O.	3d best single tray Anjou	2 00

PLATE OF PEARS—SUMMER.

Name of Owner.	Postoffice.	Awards.	Amount.
H. Burkholder	Clyde, O.	Best Bartlett	\$3 00
C. W. Counter	Toledo, O., (Nicholas Bldg.)	2d best Bartlett	2 00
Wm. Miller	Port Clinton, O.	3d best Bartlett	1 00
Fred Hutchinson	Clyde, O.	Best Clapp's Favorite	3 00

HORTICULTURAL PRODUCTS—Continued.

PLATE OF PEARS—SUMMER—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
S. R. Gill & Son.....	Port Clinton, O.....	2d best Clapp's Favorite.....	\$2 00
H. H. Herron.....	New Marshfield, O.....	3d best Clapp's Favorite.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Doyenne Boussock.....	3 00
C. W. Counter.....	Toledo, O., (Nicholas Bldg.).....	2d best Doyenne Boussock.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Doyenne Boussock.....	1 00
C. W. Counter.....	Toledo, O., (Nicholas Bldg.).....	Best Flemish Beauty.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Flemish Beauty.....	2 00
J. L. Ropp.....	Canal Winchester, O.....	Best Tyson.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Tyson.....	2 00
Mabel Hutchinson.....	Clyde, O.....	3d best Tyson.....	1 00

FALL.

Name of Owner.	Postoffice.	Awards.	Amount.
Mabel Hutchinson.....	Clyde, O.....	Best Buerre Bose.....	\$3 00
Fred Hutchinson.....	Clyde, O.....	2d best Buerre Bose.....	2 00
Fred Hutchinson.....	Clyde, O.....	Best Buerre Clairgeau.....	3 00
Mabel Hutchinson.....	Clyde, O.....	2d best Buerre Clairgeau.....	2 00
W. W. Farnsworth.....	Waterville, O.....	3d best Buerre Clairgeau.....	1 00
H. Burkholder.....	Clyde, O.....	Best Buffam.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Buffam.....	2 00
Wm. Miller.....	Port Clinton, O.....	3d best Buffam.....	1 00
H. Burkholder.....	Clyde, O.....	Best Duchess.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Duchess.....	2 00
Mabel Hutchinson.....	Clyde, O.....	3d best Duchess.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Howell.....	3 00
C. W. Counter.....	Toledo, O.....	2d best Howell.....	2 00
Fred Hutchinson.....	Clyde, O.....	3d best Howell.....	1 00
Mabel Hutchinson.....	Clyde, O.....	Best Louise Bonne.....	3 00
Fred Hutchinson.....	Clyde, O.....	2d best Louise Bonne.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best Louise Bonne.....	1 00
H. C. Kieffer.....	Frankfort, O., R. R. 1.....	Best Seckel.....	3 00
C. W. Counter.....	Toledo, O.....	2d best Seckel.....	2 00
W. W. Farnsworth.....	Waterville, O.....	3d best Seckel.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Sheldon.....	3 00
H. Burkholder.....	Clyde, O.....	2d best Sheldon.....	2 00
Wm. Miller.....	Port Clinton, O.....	3d best Sheldon.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Vermont Beauty.....	3 00
C. W. Counter.....	Toledo, O.....	Best White Doyenne.....	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best White Doyenne.....	2 00
E. A. Brennehan.....	Camp Chase, O.....	3d best White Doyenne.....	1 00

WINTER.

Name of Owner.	Postoffice.	Awards.	Amount.
C. W. Counter.....	Toledo, O.....	Best Anjou.....	\$3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Anjou.....	2 00
Fred Hutchinson.....	Clyde, O.....	3d best Anjou.....	1 00
C. W. Counter.....	Toledo, O.....	Best Columbia.....	3 00
W. W. Farnsworth.....	Waterville, O.....	2d best Columbia.....	2 00
Carson Bros.....	Middleport, O.....	Best Keiffer.....	3 00
Moses A. Hagler.....	Xenia, O.....	2d best Keiffer.....	2 00
W. H. Ortman.....	Hallsville, O.....	3d best Keiffer.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Lawrence.....	3 00
C. W. Counter.....	Toledo, O.....	2d best Lawrence.....	2 00
Fred Hutchinson.....	Clyde, O.....	3d best Lawrence.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Winter Nellis.....	3 00

HORTICULTURAL PRODUCTS—Continued.

GRAPES.

Name of Owner.	Postoffice.	Awards.	Amount.
W. H. West.....	Chillicothe, O.....	Best 6 varieties, table qualities to be considered.	\$5 00
E. A. Brenneman.....	Camp Chase, O.....	2d best 6 varieties, table qualities to be considered.	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best 6 varieties, table qualities to be considered.	2 00
W. H. West.....	Chillicothe, O.....	Best 6 varieties, market qualities considered.	5 00
E. A. Brenneman.....	Camp Chase, O.....	2d best 6 varieties, market qualities considered.	3 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best 6 varieties, market qualities considered.	2 00
C. W. Counter.....	Toledo, O.....	Best collection, 10 varieties.	8 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best collection, 10 varieties.	5 00
W. H. West.....	Chillicothe, O.....	3d best collection, 10 varieties.	3 00
W. H. West.....	Chillicothe, O.....	Best collection, 20 varieties.	12 00
C. W. Counter.....	Toledo, O.....	2d best collection, 20 varieties.	10 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	3d best collection, 20 varieties.	5 00

PLATE GRAPES.

Name of Owner.	Postoffice.	Awards.	Amount.
W. H. West.....	Chillicothe, O.....	Best Agawam.....	\$2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Agawam.....	1 00
W. H. West.....	Chillicothe, O.....	Best Brighton.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Brighton.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Brilliant.....	2 00
W. H. West.....	Chillicothe, O.....	Best Campbell's Early.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Campbell's Early.....	1 00
C. W. Counter.....	Toledo, O.....	Best Catawba.....	2 00
W. H. West.....	Chillicothe, O.....	2d best Catawba.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Colerain.....	2 00
W. H. West.....	Chillicothe, O.....	Best Concord.....	2 00
E. A. Brenneman.....	Camp Chase, O.....	2d best Concord.....	1 00
C. W. Counter.....	Toledo, O.....	Best Delaware.....	2 00
W. H. West.....	Chillicothe, O.....	2d best Delaware.....	1 00
C. W. Counter.....	Toledo, O.....	Best Empire State.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Empire State.....	1 00
C. W. Counter.....	Toledo, O.....	Best Green Mountain.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best Green Mountain.....	1 00
W. H. West.....	Chillicothe, O.....	Best Ives.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Ives.....	1 00
C. W. Counter.....	Toledo, O.....	Best King.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best King.....	1 00
W. H. West.....	Chillicothe, O.....	Best Lindley.....	2 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	2d best Lindley.....	1 00
J. L. Ropp.....	Canal Winchester, O.....	Best Moore's Diamond.....	2 00
C. W. Counter.....	Toledo, O.....	2d best Moore's Diamond.....	1 00
W. W. Farnsworth.....	Waterville, O.....	Best Moore's Early.....	2 00
C. W. Counter.....	Toledo, O.....	2d best Moore's Early.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Moyer.....	2 00
C. W. Counter.....	Toledo, O.....	2d best Moyer.....	1 00
Harry Bookwater.....	Hallsville, O.....	Best Niagara.....	2 00
C. W. Counter.....	Toledo, O.....	2d best Niagara.....	1 00
E. A. Brenneman.....	Camp Chase, O.....	Best Pocklington.....	2 00
W. H. West.....	Chillicothe, O.....	2d best Pocklington.....	1 00
C. W. Counter.....	Toledo, O.....	Best Salem.....	2 00
W. H. West.....	Chillicothe, O.....	2d best Salem.....	1 00
J. L. Ropp.....	Canal Winchester, O.....	Best Vergennes.....	2 00
C. W. Counter.....	Toledo, O.....	Best Wilder.....	2 00
W. W. Farnsworth.....	Waterville, O.....	2d best Wilder.....	1 00
C. W. Counter.....	Toledo, O.....	Best Woodruff Red.....	2 00
W. H. West.....	Chillicothe, O.....	2d Best Woodruff Red.....	1 00
Mrs. T. S. Johnson.....	Port Clinton, O.....	Best Worden.....	2 00
W. H. West.....	Chillicothe, O.....	2d best Worden.....	1 00

HORTICULTURAL PRODUCTS—Continued.

COUNTY FRUITS.

Name of Owner.	Postoffice.	Awards.	Amount.
U. T. Cox.....	Proctorville, O.....	Best county exhibit of 100 plates of fruits of various kinds.....	\$100 00
Johnson & Gill.....	Port Clinton, O.....	2d best county exhibit of 100 plates of fruits of various kinds.....	85 00
W. W. Farnsworth.....	Waterville, O.....	3d best county exhibit of 100 plates of fruits of various kinds.....	65 00
Fred Hutchinson.....	Clyde, O.....	4th best county exhibit of 100 plates of fruits of various kinds.....	50 00
M. I. Shively.....	Chillicothe, O.....	5th best county exhibit of 100 plates of fruits of various kinds.....	40 00
J. L. Ropp.....	Canal Winchester, O.....	6th best county exhibit of 100 plates of fruits of various kinds.....	30 00

DECORATIVE AND FLOWERING PLANTS,
PROFESSIONAL LIST.

Name of Owner.	Postoffice.	Awards.	Amount.
Livingston Seed Co.....	Columbus, O.....	Best collection of Palms.....	\$12 00
Livingston Seed Co.....	Columbus, O.....	Best single specimen Palm.....	8 00
Livingston Seed Co.....	Columbus, O.....	Best collection Ferns and Lycopodium, 15 or more varieties.....	12 00
Livingston Seed Co.....	Columbus, O.....	Best collection of variegated foliage plants.....	10 00
Livingston Seed Co.....	Columbus, O.....	Best collection of stove and greenhouse plants, not less than 50.....	20 00
Indianola Florists.....	Columbus, O.....	2d best collection of stove and greenhouse plants, not less than 50.....	12 00
Indianola Florists.....	Columbus, O.....	Best collection of Begonias.....	10 00
Livingston Seed Co.....	Columbus, O.....	2d best collection of Begonias.....	5 00
Indianola Florists.....	Columbus, O.....	Best collection of Cannas.....	10 00
Livingston Seed Co.....	Columbus, O.....	2d best collection of Cannas.....	5 00
Livingston Seed Co.....	Columbus, O.....	Best single basket filled with plants.....	5 00
Livingston Seed Co.....	Columbus, O.....	Best vase filled.....	6 00
Adolph Campe.....	Columbus, O.....	2d best vase filled.....	4 00
Livingston Seed Co.....	Columbus, O.....	Best pair Hanging Baskets.....	5 00
Adolph Campe.....	Columbus, O.....	2d best pair Hanging Baskets.....	3 00
Livingston Seed Co.....	Columbus, O.....	Best porch box.....	6 00
Indianola Florists.....	Columbus, O.....	2d best porch box.....	4 00
Livingston Seed Co.....	Columbus, O.....	Best single specimen Asparagus, sprengeri or plumosus.....	5 00
Livingston Seed Co.....	Columbus, O.....	Best pair bouquets.....	10 00
Indianola Florists.....	Columbus, O.....	2d best pair bouquets.....	5 00
Gustav Schneider.....	Springfield, O.....	Best dining table vase, not less than 24 in. high.....	10 00
Indianola Florists.....	Columbus, O.....	2d best dining table vase, not less than 24 in. high.....	5 00
Livingston Seed Co.....	Columbus, O.....	Best dining table vase, not over 12 in. high.....	\$5 00
Indianola Florists.....	Columbus, O.....	2d best dining table vase, not over 12 in. high.....	3 00
Indianola Florists.....	Columbus, O.....	Best large festival design.....	20 00
Livingston Seed Co.....	Columbus, O.....	2d best large festival design.....	10 00
Indianola Florists.....	Columbus, O.....	Best large funeral design.....	25 00
Livingston Seed Co.....	Columbus, O.....	2d best large funeral design.....	15 00
Indianola Florists.....	Columbus, O.....	Best collection small designs.....	25 00
Livingston Seed Co.....	Columbus, O.....	2d best collection small designs.....	15 00
Livingston Seed Co.....	Columbus, O.....	Best display cut Roses.....	15 00
Cushman Gladiolus Co.....	Sylvania, O.....	Best display cut Gladioli.....	15 00
Livingston Seed Co.....	Columbus, O.....	2d best display cut Gladioli.....	10 00
Cushman Gladiolus Co.....	Sylvania, O.....	Best display cut Dahlias.....	15 00
Livingston Seed Co.....	Columbus, O.....	2d best display cut Dahlias.....	10 00
Livingston Seed Co.....	Columbus, O.....	Best display cut Carnations.....	10 00
Cushman Gladiolus Co.....	Sylvania, O.....	2d best display cut Carnations.....	5 00
E. A. Brenneeman.....	Camp Chase, O.....	Best display cut Asters.....	10 00
Livingston Seed Co.....	Columbus, O.....	2d best display cut Asters.....	5 00
Livingston Seed Co.....	Columbus, O.....	Best display of any other variety of cut flowers.....	10 00
Indianola Florists.....	Columbus, O.....	2d best display of any other varieties of cut flowers.....	5 00

HORTICULTURAL PRODUCTS—Continued

CUT FLOWERS AND FLORAL DESIGNS.

Name of Owner.	Postoffice.	Awards.	Amount.
Livingston Seed Co.....	Columbus, O.....	Best display of cut flowers not less than 25 varieties, etc.	\$25 00
Indianola Florists.....	Columbus, O.....	2d best display of cut flowers not less than 25 varieties, etc.	15 00
Livingston Seed Co.....	Columbus, O.....	Finest decorated dining table.	80 00
Indianola Florists.....	Columbus, O.....	2d finest decorated dining table.	60 00
Gustav Schneider.....	Springfield, O.....	3d finest decorated dining table.	40 00
Miss Rachael M. Smith.....	Trinway, O.....	4th finest decorated dining table.	25 00

PLANTS AND FLOWERS.

AMATEUR LIST.

Name of Owner.	Postoffice.	Awards.	Amount.
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Palms.....	\$3 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	2d best display of Palms.....	5 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Ferns.....	6 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best display of Ferns.....	4 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Cacti and Aloes.....	5 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best display of Cacti and Aloes.....	3 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	Best display of variegated leaved plants other than Coleus.....	5 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	2d best display of variegated leaved plants other than Coleus.....	3 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	Best display of climbing plants.....	5 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	2d best display of climbing plants.....	3 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Begonias.....	6 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best display of Begonias.....	4 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Geraniums.....	6 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	2nd best display of Geraniums.....	4 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	Best display of Asters, pot grown.....	3 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best display of Asters, pot grown.....	\$2 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best display of Coleus.....	6 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best display of Coleus.....	4 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Pennsylvania Ave.	Best single vase.....	3 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best single vase.....	2 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best hanging basket.....	3 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Marshall Ave.	2d best hanging basket.....	2 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Pennsylvania Ave.	Best porch box.....	4 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	2d best porch box.....	2 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Pennsylvania Ave.	Best single specimen Palm.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	2d best single specimen Palm.....	1 00
Edith Elliott.....	Columbus, O., 190 East Mound St.	Best single specimen Boston Fern.....	2 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Pennsylvania Ave.	2d best single specimen Boston Fern.....	1 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.	Best single specimen Rubber Plant.....	2 00

HORTICULTURAL PRODUCTS—Continued.

PLANTS AND FLOWERS—Continued.

Amateur List—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best single specimen Rubber Plant.....	\$1 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	Best single specimen Asparagus Plumosa.....	2 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	2d best single specimen Asparagus Plumosa.....	1 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	Best Specimen Asparagus Sprengeri.....	2 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best specimen Asparagus Sprengeri.....	1 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	Best specimen Araucaria Pine.....	2 00
Mrs. T. A. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	2d best specimen Araucaria Pine.....	1 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best specimen Caladium.....	2 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	2d best specimen Caladium.....	1 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	Best specimen Scented Geranium.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	2d best specimen Scented Geranium.....	1 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	Best specimen Flowering Geranium.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	2d best specimen Flowering Geranium.....	1 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best specimen Fuchsia.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	2d best specimen Fuchsia.....	1 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	Best specimen Begonia.....	2 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best specimen Begonia.....	1 00
Mrs. B. F. Sampson.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best specimen Aspidistra.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	2d best specimen Aspidistra.....	1 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	Best specimen Canna.....	2 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	Best specimen Umbrella Plant.....	2 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	2d best specimen Umbrella Plant.....	1 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	Best display of all plants and flowers.....	12 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	2d best display of all plants and flowers.....	8 00
Albert Pearce.....	Akron, O., 68 Tallmadge St.....	3d best display of all plants and flowers.....	5 00

CUT FLOWERS.

Amateur List.

Name of Owner.	Postoffice.	Awards.	Amount.
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best pair bouquets.....	\$4 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best dining table vase.....	4 00
Frances Louise Forbes.....	Columbus, O., 246 Mar- shall Ave.....	2d best dining table vase.....	2 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best display cut Roses.....	5 00
Doris Hall.....	Milo, O.....	Best display cut Carnations.....	5 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best display cut Carnations.....	3 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best display cut Gladioli.....	5 00
Doris Hall.....	Milo, O.....	2d best display cut Gladioli.....	3 00
Robert H. Stretcher.....	Yellow Springs, O.....	Best display cut Dahlias.....	5 00
E. E. Stretcher.....	Springfield, O.....	2d best display cut Dahlias.....	3 00
Robert H. Stretcher.....	Yellow Springs, O.....	Best display cut Asters.....	3 00

HORTICULTURAL PRODUCTS—Concluded.

PLANTS AND FLOWERS—Concluded.

Amateur List—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best display cut Astera.....	\$2 00
Doris Hall.....	Milo, O.....	Best display cut Phlox.....	3 00
Warren Bieber.....	Delaware, O.....	2d best display cut Phlox.....	2 00
Warren Bieber.....	Delaware, O.....	Best display cut Zinnias.....	3 00
Frances Louise Forbes.....	Columbus, O., 246 Mar- shall Ave.....	2d best display cut Zinnias.....	2 00
Warren Bieber.....	Delaware, O.....	Best display cut Verbenas.....	3 00
Doris Hall.....	Milo, O.....	2d best display cut Verbenas.....	2 00
Warren Bieber.....	Delaware, O.....	Best display cut Geraniums.....	3 00
Frances Louise Forbes.....	Columbus, O., 246 Mar- shall Ave.....	2d best display cut Geraniums.....	2 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	Best display of any other variety of cut flowers.....	3 00
Robert H. Stretcher.....	Yellow Springs, O.....	2d best display of any other variety of cut flowers.....	2 00
Edith Elliott.....	Columbus, O., 190 East Mound St.....	Best display of cut flowers, not less than 25 varieties shown, etc.....	15 00
Fred Prosser, Jr.....	Columbus, O., 1103 Penn- sylvania Ave.....	2d best display of cut flowers, not less than 25 varieties shown, etc.....	12 00
Mrs. T. H. Kennedy.....	Columbus, O., 373 Mar- shall Ave.....	3d best display of cut flowers, not less than 25 varieties shown, etc.....	8 00
Mrs. S. O. Eggert.....	Massillon, O.....	4th best display of cut flowers, not less than 25 varieties shown, etc.....	5 00

ELEVENTH DEPARTMENT—WOMAN'S WORK.

T. E. CROMLEY, Member in Charge.

MRS. AMY C. NICKERSON

Superintendent.

JUDGES.

MRS. SOPHIE JOSEPH, MRS. ANNA MAHER, MRS. MARTHA T. WEAVER,
MRS. F. J. PETERS.

Received for care of exhibits and space, 1912.....	\$149 40
Paid superintendents, judges, etc., 1912.....	1,029 75
Premiums offered, 1912.....	2,038 00
Premiums paid, 1912.....	1,922 50
Total number of entries, 1912—4,519.	

Received for care of exhibits and space, 1911.....	\$167 60
Paid superintendents, judges, etc., 1911.....	1,030 40
Premiums offered, 1911.....	2,327 50
Premiums paid 1911.....	2,106 00
Total number of entries, 1911—4,705.	

Received for care of exhibits and space, 1910.....	\$394 50
Paid superintendent, judges, etc., 1910.....	688 45
Premiums offered, 1910.....	1,789 50
Premiums paid, 1910.....	1,534 00
Total number of entries, 1910—3,721.	

HOUSEHOLD FABRICS—AMATEUR.

Name.	Postoffice.	Awards.	Amount.
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best silk quilt.....	\$3 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best silk quilt.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	Best Japanese silk quilt.....	3 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	2d best Japanese silk quilt.....	2 00
Mrs. C. C. Weekly.....	Ellenboro, W. Va.	Best worsted quilt.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best worsted quilt.....	1 00
Mrs. F. R. Martin.....	Roscoe, Ohio.	Best log cabin quilt.....	2 00
Mrs. M. W. Jennings.....	4332 Delaney St., Cincinnati, Ohio.	2d best log cabin quilt.....	1 00
Miss W. H. Covault.....	Mechanicsburg, Ohio.	Best white quilt.....	2 00
Mrs. Wm. A. Himmegar.....	677 Park St., Marion, O.	2d best white quilt.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O. R. 3.	Best calico patch work quilt.....	2 00
Mrs. Gertrude George.....	393 Taylor Ave., Columbus, O.	2d best calico patch work quilt.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best cradle quilt—calico.....	2 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	2d best cradle quilt—calico.....	1 00
Grace B. Matson.....	Ashtabula, O.	Best cradle quilt—silk.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best cradle quilt—silk.....	1 00
Mrs. Louis Innis.....	1053 Madison Ave., Columbus, O.	Best specimen of quilting.....	2 00
Mary A. Boyd.....	120 W. Lane Ave., Columbus, O.	2d best specimen of quilting.....	1 00
Mrs. Wm. A. Himmegar.....	677 Park St., Marion, O.	Best silk comfort.....	2 00
Mrs. Louis Innis.....	1053 Madison Ave., Co-lumbus, O.	2d best silk comfort.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best worsted comfort.....	2 00
Mrs. Wm. A. Himmegar.....	677 Park St., Marion, O.	2d best worsted comfort.....	1 00
Grace B. Matson.....	Ashtabula, O.	Best baby carriage robe.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lock-land, O.	2d best baby carriage robe.....	1 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best hand made rug.....	2 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	2d best hand made rug.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best woven portieres.....	3 00
Mrs. E. Buck.....	415 Arlington Ave., Lock-land, O.	2d best woven portieres.....	2 00
Mary Steward.....	Jacksontown, O.	Best 10 yards rag carpet.....	3 00
Miss Rache! M. Smith.....	Trinway, O. R. 1.....	2d best 10 yards rag carpet.....	2 00

KNITTING—AMATEUR.

Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best pair silk stockings.....	\$2 00
Maud C. Hinsey.....	Pekin, Ill.	2d best pair silk stockings.....	1 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	Best pair silk socks.....	2 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	2d best pair silk socks.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
KNITTING—AMATEUR—Continued.			
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best pair woolen stockings	\$2 00
Maud C. Hinsey	Pekin, Ill.	2d best pair woolen stockings	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best pair woolen socks	2 00
Maud C. Hinsey	Pekin, Ill.	2d best pair woolen socks	1 00
Grace B. Matson	Ashtabula, O.	Best pair golf stockings	2 00
Maud C. Hinsey	Pekin, Ill.	2d best pair golf stockings	1 00
Mrs. L. C. Covault	Mechanicsburg, O.	Best pair golf gloves	2 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best pair silk mittens	2 00
Miss Anne Miller	621 Locust St., Quincy, Ill.	2d best pair silk mittens	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best pair woolen mittens	2 00
Maud C. Hinsey	Pekin, Ill.	2d best pair woolen mittens	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best pair slippers	2 00
Mrs. N. W. Florence	594 Franklin Ave., Columbus, O.	2d best pair slippers	1 00
Mrs. Louise Kibbe	1403 Huron St., Toledo, O.	Best lady's skirt	2 00
Miss Anne Miller	6 Locust St., Quincy, Ill.	2d best lady's skirt	1 00
Mrs. Louise Kibbe	1403 Huron St., Toledo, O.	Best lady's sweater	2 00
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	2d best lady's sweater	1 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	Best child's jacket	2 00
Maud C. Hinsey	Pekin, Ill.	2d best child's jacket	1 00
Grace B. Matson	Ashtabula, O.	Best child's leggings	2 00
Mrs. Earl Peters	927 Liberty St., Ft. Wayne, Ind.	2d best child's leggings	1 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	Best infant's booties	1 00
Mrs. W. H. Covault	Mechanicsburg, O.	2d best infant's booties	50
Mrs. W. S. Humphrey	Columbus, O., Sta. B. R. 7.	Best large shawl	2 00
Mrs. Emma A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best large shawl	1 00
Mrs. L. C. Covault	Mechanicsburg, O.	Best silk necktie	2 00
Mrs. L. C. Covault	Mechanicsburg, O.	2d best silk necktie	1 00
Maud C. Hinsey	Pekin, Ill.	Best bed spread	2 00
Mrs. H. B. Souders	117 Chittenden Ave., Columbus, O.	2d best bed spread	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best large afghan	3 00
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	2d best large afghan	2 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best woolen lace, 2 yards	2 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	2d best woolen lace, 2 yards	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best linen lace, 2 yards	2 00
Grace B. Matson	Ashtabula, Ohio	2d best linen lace, 2 yards	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best cotton lace, 2 yards	2 00
Amelia D. Covault	Mechanicsburg, O.	2d best cotton lace, 2 yards	1 00
CROCHET WORK—AMATEUR			
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best pair slippers	\$2 00
Mrs. C. F. Young	Columbus, O., Box 783 Sta. B.	2d best pair slippers	1 00
Mrs. Louise J. Housel	1305 Forsythe Ave., Columbus, O.	Best lady's skirt	2 00
Grace B. Matson	Ashtabula, O.	2d best lady's skirt	1 00
Estella Gibson	307 W. 5th Marysville, O.	Best large shawl	2 00
Miss Bertha K. Krauss	State Library, Columbus, Ohio	2d best large shawl	1 00
Mrs. N. W. Florence	594 Franklin Ave., Columbus, O.	Best infant's hood	1 00
Mrs. Wm. Welch	2339 Broadway, Indianapolis, Ind.	2d best infant's hood	50
Miss Anna Miller	621 Locust St., Quincy, Ill.	Best infant's sacque	1 00
Mrs. Laura Grigg	Washington C. H., O.	2d best infant's sacque	50
Mrs. L. E. Rockwell	2069 Cedar St., Quincy, Ill.	Best infant's skirt	1 00
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	2d best infant's skirt	50

WOMAN'S WORK—Continued

Name	Postoffice	Awards	Amount
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CROCHET WORK—AMATEUR—Concluded

Mrs. Rose Muttera.....	848 N. 9th St., Springfield, Ill.	Best infant's booties.....	\$1 00
Mrs.. B. F. Sampson	1103 Pennsylvania Ave., Columbus, Ohio.....	2d best infant's booties.....	50
Mrs. Louise J. Housel.....	1306 Forsythe Ave., Columbus, O.....	Best infant's rattle.....	1 00
Amelia D. Covault.....	Mechanicsburg, O.....	2d best infant's rattle.....	50
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.....	Best luncheon set.....	2 00
Ethel M. Smiley.....	1473 Pennsylvania Ave., Columbus, O.....	2d best luncheon set.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best 6 doilies.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	2d best 6 doilies.....	50
Mrs. Rose Muttera.....	848 N. 9th St., Springfield, Ill.....	Best woolen lace.....	1 00
Miss Nannie Hall.....	838 N. High St., Lexington, Ky.....	2d best woolen lace.....	50
Mrs. C. C. Weekly.....	Ellenboro, W. Va.....	Best cotton lace.....	1 00
Carmela Scofield.....	913 Pennsylvania Ave., Columbus, O.....	2d best cotton lace.....	50
Amelia D. Covault.....	Mechanicsburg, O.....	Best Irish crochet purse.....	2 00
Mrs. W. H. Jennings.....	196 W. 6th Ave., Columbus, O.....	2d best Irish crochet purse.....	1 00
Mrs. Geo. Elliott.....	185 E. Town St., Columbus, O.....	Best Irish crochet bag.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.....	2d best Irish crochet bag.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best Irish crochet lace and insertion.....	2 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.....	2d best Irish crochet lace and insertion.....	1 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	Best Irish crochet medallion.....	1 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.....	2d best Irish crochet medallion.....	50
Mrs. C. E. Smith.....	Malta, O., Box 87.....	Best Irish crochet coat set.....	2 00
Mrs. Geo. Elliott.....	185 E. Town St., Columbus, O.....	2d best Irish crochet set.....	1 00
Mrs. R. E. Rockwell.....	2069 Cedar St., Quincy, Ill.....	Best large Afghan.....	2 00
Maud C. Hinsey.....	Pekin, Ill.....	2d best large Afghan.....	1 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.....	Best small Afghan.....	1 00
Mrs. Norma C. Berry.....	310 W. 5th Ave., Columbus, O.....	2d best small Afghan.....	50
Mrs. H. J. Swartz.....	63 E. 2d Ave., Columbus, O.....	Best bed spread.....	2 00
Mrs. May Hart.....	411 E. 14th Ave., Columbus, O.....	2d best bed spread.....	1 00
Caroline G. Ackley.....	50 N. Champion Ave., Columbus, O.....	Best display 5 pieces.....	3 00
Mrs. F. R. Martin.....	Roscoe, O.....	2d best display 5 pieces.....	2 00

HAND NEEDLE WORK—AMATEUR.

Mrs. W. B. Wolff.....	22 Augustine Ave., Mansfield, O.....	Best pair pillow cases.....	\$2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.....	2d best pair pillow cases.....	1 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.....	Best sheet.....	2 00
Celia Busser.....	Piqua, O., Box 34.....	2d best sheet.....	1 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.....	Best lady's dressing jacket.....	3 00
Mrs. Louis Innis.....	1063 Madison Ave., Columbus, O.....	2d best lady's dressing jacket.....	2 00
Mrs. N. W. Florence.....	504 Franklin Ave., Columbus, O.....	Best combination suit.....	3 00
Celia Busser.....	Piqua, O., Box 34.....	2d best combination suit.....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.....	Best night dress.....	2 00
Garnet Seaman.....	1194 Fair Ave., Columbus, O.....	2d best night dress.....	1 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.....	Best chemise.....	2 00
Miss H. A. Miller.....	Westerville, O.....	2d best chemise.....	1 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	Best skirt.....	2 00
Maud C. Hinsey.....	Pekin, Ill.....	2d best skirt.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best corset cover.....	2 00
Ruby Krumm.....	416 Luckhaupt Ave., Columbus, O.....	2d best corset cover.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.....	Best infant's robe and skirt.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best infant's robe and skirt.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice	Awards.	Amount
HAND NEEDLE WORK—AMATEUR—Concluded.			
M. Della Armstrong	Yellow Springs, O.	Best fancy apron	\$2 00
Miss Elizabeth Talbutt	838 W. High St., Lexington, Ky.	2d best fancy apron	1 00
Mrs. B. F. Sampson	1103 Pennsylvania Ave., Columbus, O.	Best jabot	2 00
Mrs. Wm. R. Foster	647 Oakwood Ave., Columbus, O.	2d best jabot	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best Dutch collar	2 00
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	2d best Dutch collar	1 00
SHIRT WAISTS—AMATEUR.			
Mrs. Sarah Stockstill	671 S. Main St., Dayton, O.	Best eyelet embroidery	\$5 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best eyelet embroidery	3 00
Mrs. Earl Peters	927 Liberty St., Ft. Wayne, Ind.	Best eyelet and French embroidery	5 00
Mrs. Fred Killets	2492 Pindlay Ave., Columbus, O.	2d best eyelet and French embroidery	3 00
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	Best French embroidery	5 00
Maud C. Hinsey	Pekin, Ill.	2d best French embroidery	3 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best braided	3 00
Mrs. Emma A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best braided	2 00
Mrs. A. C. Eggert	1306 Forsythe Ave., Columbus, O.	Best drawn work	3 00
Mrs. Louise J. House	1306 Forsythe Ave., Columbus, O.	2d best drawn work	2 00
Mrs. B. F. Sampson	1103 Pennsylvania Ave., Columbus, O.	Best fancy	3 00
Mrs. W. B. Wolf	22 Augustine Ave., Mansfield, O.	2d best fancy	2 00
Mrs. J. L. McKelvy	562 Franklin Ave., Columbus, O.	Best Irish crochet	5 00
Mrs. Louis Innis	1053 Madison Ave., Columbus, O.	2d best Irish crochet	3 00
MACHINE SEWING—AMATEUR.			
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	Best suit underwear, 3 pieces	\$2 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best suit underwear, 3 pieces	1 00
Mrs. Louis Innis	1053 Madison Ave., Columbus, O.	Best night dress	1 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best night dress	50
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	Best corset cover	\$1 00
Miss Anna Miller	621 Locust St., Quincy, Ill.	2d best corset cover	50
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	Best short underskirt	1 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best short underskirt	50
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	Best skirt	1 00
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	2d best skirt	50
Grace B. Matson	Ashtabula, O.	Best lady's dress, cotton	2 00
Mrs. M. W. Jennings	4232 Delaney St., Cincinnati, O.	2d best lady's dress, cotton	1 00
Mrs. Louis Innis	1053 Madison Ave., Columbus, O.	Best dressing jacket, cotton	2 00
Mrs. G. E. Brittain	900 Manhattan Ave., Dayton, O.	2d best dressing jacket, cotton	1 00
Mrs. R. T. Bates	115 N. Broadway Dayton, O.	Best fancy apron	1 00
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	2d best fancy apron	50
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	Best kitchen apron	1 00
Mrs. Geo. Malay	137 Sherman Ave., Columbus, O.	2d best kitchen apron	50
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	Best night shirt	1 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	Best pajamas	1 00
Grace B. Matson	Ashtabula, O.	2d best pajamas	50

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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CROSS STITCH EMBROIDERY—AMATEUR.

Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.	Best table cover.....	\$2 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	2d best table cover.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best pin cushion.....	2 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	2d best pin cushion.....	1 00
Mrs. Ed. Greiner.....	73 E. Williams St., Delaware, O.	Best book cover.....	2 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	Best fancy bag.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best fancy bag.....	1 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.	Best apron.....	2 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best apron.....	1 00
Maud C. Hinsey.....	Pekin, Ill.	Best shirt waist set.....	2 60
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	2d best shirt waist set.....	1 00
Mary Goddard.....	1038 Oak St., Columbus, O.	Best towel.....	2 00
Caroline G. Ackley.....	59 N. Champion Ave., Columbus, O.	2d best towel.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best specimen.....	2 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	2d best specimen.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best display, 5 pieces.....	3 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best display, 5 pieces.....	2 00

COTTON LINEN EMBROIDERY—AMATEUR.

Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	Best pair pillow cases.....	\$2 00
Mrs. C. J. Rockey.....	27 E. Gambier St., Mt. Vernon, O.	2d best pair pillow cases.....	1 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	Best sheet.....	2 00
Mrs. C. E. Smith.....	Malta, O., Box 87.	2d best sheet.....	1 00
Mrs. J. W. Parker.....	19 N. Liberty St., Delaware, O.	Best table cloth.....	2 00
Mrs. Roy T. McClure.....	Washington C. H., O.	2d best table cloth.....	1 00
Maud C. Hinsey.....	Pekin, Ill.	Best dinner napkins (12).....	2 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	2d best dinner napkins (12).....	1 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	Best lunch cloth.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, O.	2d best lunch cloth.....	1 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.	Best parasol.....	2 00
Celia Busser.....	Piqua, O., Box 34.	2d best parasol.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best center piece.....	2 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	2d best center piece.....	1 00
Louise Zunkeller.....	322 3d Ave., Dayton, Ky.	Best doilies (6).....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	2d best doilies (6).....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best tray cloth.....	2 00
Louise Zunkeller.....	322 3d Ave., Dayton, Ky.	2d best tray cloth.....	1 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	Best sideboard cover.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best sideboard cover.....	1 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	Best towel.....	2 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	2d best towel.....	1 00
Mrs. Earl Peters.....	927 Liberty St., Ft. Wayne, Ind.	Best pair guest's towels.....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	2d best pair guest's towels.....	1 00
Maud C. Hinsey.....	Pekin, Ill.	Best monogram.....	2 00
Mrs. R. P. Hain.....	1749 N. 4th St., Columbus, O.	2d best monogram.....	1 00
Mrs. J. C. McCord.....	Ashville, O.	Best lady's skirt.....	3 00
M. Della Armstrong.....	Yellow Springs, O.	2d best lady's skirt.....	2 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
COTTON OR LINEN EMBROIDERY.			
Maud C. Hinsey	Pekin, Ill.	Best chemise	\$2 00
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	2d best chemise	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best corset cover	2 00
Miss Elizabeth Talbutt	838 W. High St., Lexington, Ky.	2d best corset cover	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best shirtwaist set	2 00
Mrs. O. J. Miller	Mt. Gilead, O.	2d best shirtwaist set	1 00
Maud C. Hinsey	Pekin, Ill.	Best infant's dress	2 00
Mrs. Earl Peters	927 Liberty St., Ft. Wayne, Ind.	2d best infant's dress	1 00
Mrs. Pearl Peters	927 Liberty St., Ft. Wayne, Ind.	Best infant's pillow	2 00
Grace B. Matson	Ashtabula, O.	2d best infant's pillow	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best infant's cap	2 00
Maud C. Hinsey	Pekin, Ill.	2d best infant's cap	1 00
Mrs. W. H. Covault	Mechanicsburg, O.	Best bed set	2 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best specimen	2 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best specimen	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best specimen shadow embroidery	2 00
Mrs. Frank W. Jennings	61 W. 11th Ave., Columbus, O.	2d best specimen shadow embroidery	1 00
Miss Elizabeth Talbutt	838 W. High St., Lexington, Ky.	Best specimen French embroidery	2 00
Mrs. W. B. Wolff	22 Augustine Ave., Mansfield, O.	2d best specimen French embroidery	1 00
Maud C. Hinsey	Pekin, Ill.	Best specimen Bermuda fagoting	2 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	2d best specimen Bermuda fagoting	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best specimen Mountmellick embroidery	2 00
Mrs. Agnes Cowgill	61 Chittenden Ave., Columbus, O.	2d best specimen Mountmellick embroidery	1 00
Miss Alice Vorheis	19 N. Liberty St., Delaware, O.	Best specimen Hedebo embroidery	2 00
Miss Elizabeth Leigh	Groveport, O.	2d best specimen Hedebo embroidery	1 00
Lou McIntyre	1733 Summit St., Columbus, O.	Best specimen cut work embroidery	2 00
Maud C. Hinsey	Pekin, Ill.	2d best specimen cut work embroidery	1 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best specimen Coronation embroidery	2 00
Mrs. Louis Innis	1053 Madison Ave., Columbus, O.	2d best specimen Coronation embroidery	1 00
Grace B. Matson	Ashtabula, O.	Best specimen Wallachian embroidery	2 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best specimen Wallachian embroidery	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best specimen German spachtel embroidery	2 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best specimen lazy daisy	2 00
Mrs. Louise Kibbe	1403 Huron St., Toledo, O.	2d best specimen lazy daisy	1 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	Best specimen Saxonia embroidery	2 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	2d best specimen Saxonia embroidery	1 00
Fanny Fearn	Groveport, O.	Best specimen punch embroidery	2 00
Maud C. Hinsey	Pekin, Ill.	2d best specimen punch embroidery	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best specimen Venetian ladder work	2 00
Mrs. Earl Peters	927 Liberty St., Ft. Wayne, Ind.	2d best specimen Venetian ladder work	1 00
Mrs. Clara G. Fogle	Mt. Gilead, O.	Best specimen Gittertyl	2 00
Mrs. Louise Kibbe	1403 Huron St., Toledo, O.	2d best specimen Gittertyl	1 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	2d best Repousse emb. suit underwear	3 00
Miss Nannie Hall	838 W. High St., Lexington, Ky.	Best luncheon set (7 pieces)	5 00
Louise Zumkeller	322 3d Ave., Dayton, Ky.	2d best luncheon set (7 piece)	3 00
Mrs. Clara G. Fogle	Mt. Gilead, O.	Best display (5 pieces)	3 00
Mrs. C. F. Young	Columbus, O., Sta. B, Box 783	2d best display (5 pieces)	2 00

WOMAN'S WORK—Continued.

Name	Postoffice.	Awards.	Amount.
EYELET EMBROIDERY—AMATEUR.			
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	Best centerpiece.....	\$2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.	2d best centerpiece.....	1 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best 6 doilies.....	2 00
Mrs. J. C. McCord.....	Ashville, O.	2d best 6 doilies.....	1 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	Best corset cover.....	2 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	2d best corset cover.....	1 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	Best collar and cuffs.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best collar and cuffs.....	1 00
Mrs. J. W. Parker.....	19 N. Liberty St., Delaware, O.	Best large collar.....	2 00
Amelia D. Covault.....	Mechanicsburg, O.	2d best large collar.....	1 00
Ivy A. Gearhart.....	Van Wert, O.	Best sideboard cover.....	2 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best sideboard cover.....	1 00
Mrs. D. A. Bowne.....	2598 Medary Ave., Columbus, O.	Best pair pillow cases.....	2 00
Mrs. C. C. Weekly.....	Ellenboro, W. Va.	2d best pair pillow cases.....	1 00
Ivy A. Gearhart.....	Van Wert, O.	Best parasol.....	2 00
Mrs. Earl Peters.....	927 Liberty St., Ft. Wayne, Ind.	2d best parasol.....	1 00
Ivy A. Gearhart.....	Van Wert, O.	Best hat.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.	2d best hat.....	1 00
Mrs. W. B. Wolff.....	22 Augustine Ave., Mansfield, O.	Best infant's cap.....	2 00
Miss Nannie Hull.....	838 W. High St., Lexington, Ky.	2d best infant's cap.....	1 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Dayton, O.	Best infant's bib.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best infant's bib.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best specimen.....	2 00
Ivy A. Gearhart.....	Van Wert, O.	2d best specimen.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best display (5 pieces).....	3 00
Ivy A. Gearhart.....	Van Wert, O.	2d best display (5 pieces).....	2 00
HARDANGER EMBROIDERY—AMATEUR.			
Grace B. Matson.....	Ashtabula, O.	Best dresser cover.....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	2d best dresser cover.....	1 00
Jessie Bolick.....	27 W. Hinman Ave., Columbus, O.	Best centerpiece, white.....	2 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best centerpiece, white.....	1 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	Best centerpiece in colors.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.	Best table cover.....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	2d best table cover.....	1 00
Mrs. Frank M. Jennings.....	61 W. 11th Ave., Columbus, O.	Best collars and cuffs.....	2 00
Amelia D. Covault.....	Mechanicsburg, O.	2d best collar and cuffs.....	1 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	Best specimen.....	2 00
Jessie Bolick.....	27 Hinman Ave., Columbus, O.	2d best specimen.....	1 00
DRAWN WORK—AMATEUR.			
Mrs. H. W. Borrer.....	276 Ogden Ave., Columbus, O.	Best table cloth.....	\$2 00
Mrs. C. E. Smith.....	Malta, O., Box 87.....	2d best table cloth.....	1 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	Best lunch cloth.....	2 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	2d best lunch cloth.....	1 00
Mrs. B. P. Sampson.....	1103 Pennsylvania Ave., Columbus, O.	Best centerpiece.....	2 00
Mrs. Geo. Malay.....	137 Sherman Ave., Columbus, O.	2d best centerpiece.....	1 00
Amelia D. Covault.....	Mechanicsburg, O.	Best tray cloth.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best tray cloth.....	1 00
Mrs. A. W. Tompkins.....	2264 N. Delaware St., Indianapolis, Ind.	Best 6 napkins.....	2 00
Mrs. C. E. Smith.....	Malta, O., Box 87.....	2d best 6 napkins.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best 6 doilies.....	2 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	2d best 6 doilies.....	1 00
Mrs. C. F. Young.....	Columbus, O., Sta. B., Box 783.....	Best dresser cover.....	2 00
Mrs. C. C. Weekly.....	Ellenboro, W. Va.	2d best dresser cover.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
DRAWN WORK—AMATEUR—Concluded.			
Mary Godard.....	1038 Oak St., Columbus, O.	Best pair pillow cases.....	\$2 00
Mrs. C. C. Weekly.....	Ellenboro, W. Va.....	2d best pair pillow cases.....	1 00
Ivy A. Gearhart.....	Van Wert, O.....	Best sheet.....	2 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.....	2d best sheet.....	1 00
Mrs. Rose Muttera.....	848 N. 9th St., Springfield, Ill.....	Best towel.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.....	2d best towel.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.....	Best handkerchief.....	2 00
Mrs. Louis Innis.....	1063 Madison Ave., Columbus, O.....	2d best handkerchief.....	1 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.....	Best pair curtains.....	3 00
Mrs. Louis J. Housel.....	1305 Forsythe Ave., Columbus, O.....	2d best pair curtains.....	2 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.....	Best bedspread.....	3 00
Miss Elizabeth Leigh.....	Groveport, O.....	Best specimen hemstitching.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.....	2d best specimen hemstitching.....	1 00
Mrs. Fred Killitts.....	2492 Findlay Ave., Columbus, O.....	Best specimen silk thread in colors.....	2 00
Mrs. C. C. Weekly.....	Ellenboro, W. Va.....	2d best specimen silk thread in colors.....	1 00
SILK EMBROIDERY—AMATEUR.			
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.....	Best lunch cloth.....	\$2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.....	2d best lunch cloth.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	Best centerpiece.....	2 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.....	2d best centerpiece.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best tray cloth.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.....	2d best tray cloth.....	1 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.....	Best table cover.....	2 00
Maud C. Hinsey.....	Pekin, Ill.....	2d best table cover.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	Best sideboard cover.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	2d best sideboard cover.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best 6 doilies.....	2 00
Mrs. C. F. Young.....	Columbus, O., Sta. B, Box 783.....	2d best 6 doilies.....	1 00
Mrs. Ed. Greiner.....	73 E. Williams St., Delaware, O.....	Best panel.....	2 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.....	2d best panel.....	1 00
Mrs. Earl Peters.....	927 Liberty St., Ft. Wayne, Ind.....	Best fancy bag in colors.....	2 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.....	2d best fancy bag in colors.....	1 00
Mrs. Ed. Greiner.....	73 E. Williams St., Delaware, O.....	Best picture frame.....	2 00
Mrs. C. F. Young.....	Columbus, O Sta. B, Box 783.....	2d best picture frame.....	1 00
Mrs. Ed. Greiner.....	73 E. Williams St., Delaware, O.....	Best specimen Kensington embroidery.....	2 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.....	2d best specimen Kensington embroidery.....	1 00
Maud C. Hinsey.....	Pekin, Ill.....	Best specimen Roman embroidery.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best specimen Roman embroidery.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.....	Best specimen Delft embroidery.....	2 00
Grace B. Matson.....	Ashtabula, O.....	2d best specimen Delft embroidery.....	1 00
Mrs. J. W. Parker.....	19 N. Liberty St., Delaware, O.....	Best display (5 pieces).....	5 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.....	2d best display (5 pieces).....	2 00
Miss Elizabeth Leigh.....	Groveport, O.....	Best lady's flannel skirt.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.....	2d best lady's flannel skirt.....	1 00
Mrs. Earl Peters.....	927 Liberty St. Ft. Wayne, Ind.....	Best infant's cloak.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.....	2d best infant's cloak.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
SILK EMBROIDERY—AMATEUR—Concluded.			
Mrs. E. Buck	415 Arlington Ave., Lockland, O.	Best infant's shawl or blanket	\$2 00
Maud C. Hinsey	Pekin, Ill.	2d best infant's shawl or blanket	1 00
Mrs. A. C. Eggert	1305 Forsythe Ave., Columbus, O.	Best child's dress	2 00
Maud C. Hinsey	Pekin, Ill.	Best specimen	2 00
Miss L. P. Warman	2727 Harris Ave., Norwood, O.	2d best specimen	1 00
BATTENBURG LACE—AMATEUR.			
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best curtains	\$5 00
Mrs. Roy T. McClure	Washington C. H., O.	2d best curtains	3 00
Mrs. Geo. Bardill	92 E. Central Ave., Delaware, O.	Best table cover	3 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	2d best table cover	2 00
Mrs. R. T. Bates	115 N. Broadway, Dayton, O.	Best centerpiece	2 00
Mrs. O. J. Miller	Mt. Gilead, O.	2d best centerpiece	1 00
Mrs. Clara G. Fogle	Mt. Gilead, O.	Best 6 doilies	2 00
Miss Anne Miller	621 Locust St., Quincy, Ill.	2d best 6 doilies	1 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best Bolero silk	2 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best large collar, linen	2 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	2d best large collar, linen	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best medallion for dress garniture	2 00
Mrs. R. T. Bates	115 N. Broadway, Dayton, O.	2d best medallion for dress garniture	1 00
Ivy A. Gearhart	117 E. Crawford St., Van Wert, O.	Best specimen	2 00
Mrs. Mary Faust	22 Estella St., Delaware, O.	2d best specimen	1 00
POINT LACE—AMATEUR.			
Grace B. Matson	Ashtabula, O.	Best dress garniture	\$12 00
Mrs. N. W. Florence	594 Franklin Ave., Columbus, O.	2d best dress garniture	1 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best yoke	2 00
Mrs. Wm Rhodes	181 Chittendon Ave., Columbus, O.	2d best yoke	1 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best fan	2 00
Mrs. Roy T. McClure	Washington C. H., O.	Best large collar	2 00
Mrs. Josephine McNabb	Nellie, O.	2d best large collar	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best collar and cuffs	2 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	2d best collar and cuffs	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best tie ends	2 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	2d best tie ends	1 00
Ivy A. Gearhart	Van Wert, O.	Best handkerchief	2 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	2d best handkerchief	1 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best infant's cap	2 00
Mrs. L. E. Rockwell	2069 Cedar St., Quincy, Ill.	Best specimen	2 00
Maud C. Hinsey	Pekin, Ill.	2d best specimen	1 00
Mrs. O. J. Miller	Mt. Gilead, O.	Best specimen point applique	2 00
LACE AND TATTING—AMATEUR.			
Lace.			
Maud D. Hinsey	Pekin, Ill.	Best specimen Marie Antoinette	\$2 00
Grace B. Matson	Ashtabula, O.	Best specimen Duchess	2 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	2d best specimen Duchess	1 00
Mrs. Rose Muttera	848 N. 9th St., Springfield, Ill.	Best specimen Tenerife	2 00
Mrs. Roy T. McClure	Washington C. H. O.	2d best specimen Tenerife	1 00
Maud C. Hinsey	Pekin, Ill.	Best specimen Honiton	2 00
Mrs. L. E. Rockwell	2069 Cedar St., Quincy, Ill.	2d best specimen Honiton	1 00
Laura Belle Wiltberger	Columbus, O.	Best specimen Bobbin	2 00
Grace B. Matson	Ashtabula, O.	2d best specimen Bobbin	1 00
Mrs. C. C. Weekly	Ellenboro, W. Va.	Best specimen Netting	2 00
Mrs. C. C. Weekly	Ellenboro, W. Va.	Best specimen Netting	2 00
Mrs. Laura Gregg	Washington C. H., O.	2d best specimen Netting	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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LACE AND TATTING—AMATEUR—Concluded.

Tatting.

Mrs. J. C. McCord.....	Ashville, O.....	Best handkerchief.....	\$2 00
Miss Anna Miller.....	621 Locust St., Quincy, Ill.	2d best handkerchief.....	1 00
Miss L. P. Warman.....	2727 Harris Ave., Nor-		
	wood, O.....	Best tie ends.....	2 00
Mrs. Sarah E. Richey.....	1495 E. Main St., Colum-		
	bus, O.....	2d best tie ends.....	1 00
Mrs. Earl Peters.....	927 Liberty St., Pt.		
	Wayne, Ind.....	Best jabot.....	2 00
Mrs. C. F. Prior.....	594 Oakwood Ave., Co-		
	lumbus, O.....	2d best jabot.....	1 00
Mrs. Sarah E. Richey.....	1495 E. Main St., Colum-		
	bus, O.....	Best collar.....	2 00
Mrs. C. F. Prior.....	594 Oakwood Ave., Co-		
	lumbus, O.....	2d best collar.....	1 00
Amelia D. Covault.....	Mechanicsburg, O.....	Best 6 doilies.....	2 00
Mrs. Sarah E. Richey.....	1495 E. Main St., Colum-		
	bus, O.....	Best yoke.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best yoke.....	1 00
Mrs. Roy T. McClure.....	Washington C. H., O.....	Best specimen.....	2 00
Lavina Rhoads.....	179 Chittenden Ave., Co-		
	lumbus, O.....	2d best specimen.....	1 00

FANCY WORK—AMATEUR.

Mrs. Louis Innis.....	1053 Madison Ave., Co-		
	lumbus, O.....	Best collar and cuff set.....	\$2 00
Miss Alice Vorhies.....	19 N. Liberty St., Del-		
	aware, O.....	2d best collar and cuff set.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave.,		
	Springfield, O.....	Best lady's belt.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best lady's belt.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexing-		
	ton, Ky.....	Best 3 doilies.....	2 00
Mrs. C. F. Young.....	Columbus, O., Box 783,		
	Sta. B.....	2d best 3 doilies.....	1 00
Mrs. Rose Muttera.....	848 N. 9th St., Springfield,		
	Ill.....	Best pin cushion.....	2 00
Mrs. W. B. Wolff.....	22 Augustine Ave., Mans-		
	field, O.....	2d best pin cushion.....	1 00
Mrs. E. Buck.....	415 Arlington Ave., Lock-		
	land, O.....	Best handkerchief.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best handkerchief.....	1 00
Miss Nannie Hall.....	838 W. High St., Lexing-		
	ton, Ky.....	Best glove case.....	2 00
Mrs. W. B. Wolff.....	22 Augustine Ave., Mans-		
	field, O.....	2d best glove case.....	1 00
Celia Busser.....	Piqua, O., Box 34.....	Best fancy work bag.....	2 00
Mrs. Louise J. Housel.....	1305 Forsythe Ave., Co-		
	lumbus, O.....	2d best fancy work bag.....	1 00
Bessie L. Totten.....	Yellow Springs, O.....	Best party bag.....	2 00
Mrs. F. F. Frazier.....	53 Euclid Ave., Columbus,		
	O.....	2d best party bag.....	1 00
Miss Rachel M. Smith.....	Trinway, O R. 1.....	Best opera bag.....	2 00
Bessie L. Totten.....	Yellow Springs, O.....	2d best opera bag.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave.,		
	Springfield, O.....	Best shopping bag.....	2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best shopping bag.....	1 00
Maud C. Hinsey.....	Pekin, Ill.....	Best laundry bag.....	2 00
Mrs. Earl Peters.....	927 Liberty St., Pt.		
	Wayne, Ind.....	2d best laundry bag.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave.,		
	Springfield, O.....	Best book cover.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexing-		
	ton, Ky.....	2d best book cover.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave.,		
	Springfield, O.....	Best magazine cover.....	2 00
Fanny Fearn.....	Groveport, O.....	2d best magazine cover.....	1 00
Carrie F. Mosteller.....	118 Elmwood Ave., New-		
	ark, O.....	Best scrap basket.....	2 00
Miss Rachel M. Smith.....	Trinway, O., R. 1.....	2d best scrap basket.....	1 00

ART NEEDLE WORK—AMATEUR.

Mrs. C. L. Covault.....	Mechanicsburg, O.....	Best dress medallions.....	\$2 00
Mrs. D. A. Bowne.....	2598 Medary Ave., Co-		
	lumbus, O.....	2d best dress medallions.....	1 00
Miss Elizabeth Leigh.....	Groveport, O.....	Best stockings.....	2 00
Mrs. Emma A. Gearhart.....	117 E. Crawford St., Van		
	Wert, O.....	2d best stockings.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount
ART NEEDLE WORK—AMATEUR—Continued.			
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best 6 collars.....	\$2 00
Amelia D. Covault.....	Mechanicsburg, O.	Best collar and cuffs.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best collar and cuffs.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.	Best lunch cloth.....	2 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Dayton, O.	2d best lunch cloth.....	1 00
Ivy A. Gearhart.....	117 E. Crawford St., Van Wert, O.	Best centerpiece (24 in.).....	2 00
Mrs. J. W. Parker.....	19 N. Liberty St., Delaware, O.	2d best centerpiece (24 in.).....	1 00
Mrs. R. P. Hain.....	1749 N. 4th St., Columbus, O.	Best centerpiece (18 in.).....	2 00
Fanny Fearn.....	Groveport, O.	2d best centerpiece (18 in.).....	1 00
Mrs. C. F. Young.....	Columbus, O., Box 783, Sta. B.	Best centerpiece, lace and embroidery.....	2 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	2d best centerpiece, lace and embroidery.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best tray cloth.....	2 00
Mrs. Clara G. Pogle.....	Mt. Gilead, O.	2d best tray cloth.....	1 00
Fanny Fearn.....	Groveport, O.	Best sideboard cover.....	2 00
Mrs. R. P. Hain.....	1749 N. 4th St., Columbus, O.	2d best sideboard cover.....	1 00
Amelia D. Covault.....	Mechanicsburg, O.	2d best table runner, brenta.....	2 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best table cover, raffia.....	2 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	2d best table cover, raffia.....	1 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	Best handkerchief case.....	2 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	2d best handkerchief case.....	1 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	Best glove case.....	2 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.	2d best glove case.....	1 00
Mrs. Maud Lannes.....	801 Beech St., Columbus, O.	Best party bag.....	2 00
Fanny Fearn.....	Groveport, O.	2d best party bag.....	1 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	Best opera bag.....	2 00
Mrs. L. C. Covault.....	Mechanicsburg, O.	2d best opera bag.....	1 00
Ivy A. Gearhart.....	Van Wert, O.	Best shopping bag.....	2 00
Amelia D. Covault.....	Mechanicsburg, O.	2d best shopping bag.....	1 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	Best magazine cover.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.	2d best magazine cover.....	1 00
Fanny Fearn.....	Groveport, O.	Best book cover.....	2 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.	2d best book cover.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best specimen.....	2 00
Ivy A. Gearhart.....	Van Wert, O.	2d best specimen.....	1 00
Mrs. O. J. Miller.....	Mt. Gilead, O.	Best specimen Bulgarian.....	2 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	2d best specimen Bulgarian.....	1 00
Mrs. Clara G. Pogle.....	Mt. Gilead, O.	Best specimen Biedermeier.....	2 00
Ivy A. Gearhart.....	Van Wert, O.	2d best specimen Biedermeier.....	1 00
Mary Docherty.....	437 W. 4th Ave., Columbus, O.	Best specimen ribbon.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best specimen Jewel.....	2 00
Mrs. J. W. Parker.....	19 N. Liberty St., Delaware, O.	2d best specimen Jewel.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best specimen Roman.....	2 00
Mrs. L. C. Rockwell.....	2069 Cedar St., Quincy, Ill.	2d best specimen Roman.....	1 00
Ivy A. Gearhart.....	Van Wert, O.	Best specimen Coronation.....	2 00
Mrs. R. P. Haine.....	1749 N. 4th St., Columbus, O.	2d best specimen Coronation.....	1 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	Best specimen feather stitch.....	2 00
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	2d best specimen feather stitch.....	1 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	Best specimen Darned Net.....	2 00
Miss Elizabeth Talbutt.....	838 W. High St., Lexington, Ky.	2d best specimen Darned Net.....	1 00
Mrs. B. F. Sampson.....	1103 Pennsylvania Ave., Columbus, O.	Best specimen Hucaback.....	2 00
Mrs. L. J. Pulliam.....	1020 S. 7th St., Springfield, Ill.	2d best specimen Hucaback.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
ART NEEDLE WORK—AMATEUR—Concluded.			
Miss Nannie Hall.....	838 W. High St., Lexington, Ky.	Best specimen Outline.....	\$2 00
Miss Anne Miller.....	621 Locust St., Quincy, Ill.	2d best specimen Outline.....	1 00
Maud C. Hinsey.....	Pekin, Ill.	Best specimen Net Applique.....	2 00
Mrs. G. E. Brittan.....	900 Manhattan Ave., Dayton, O.	2d best specimen Net Applique.....	1 00
Amedia D. Covault.....	Mechanicsburg, O.	Best specimen Delft.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.	2d best specimen Delft.....	1 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	Best specimen English Smocking.....	2 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	Best display 10 finished pieces.....	10 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best display 10 finished pieces.....	5 00
COUCH PILLOWS.			
Fanny Fearn.....	Groveport, O.	Best hand needle work.....	\$2 00
Mrs. Rose Muttera.....	848 N. 9th St., Springfield, Ill.	2d best hand needle work.....	1 00
Nellie Carson.....	70 University Ave., Delaware, O.	Best cross stitch.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, Ohio.	2d best cross stitch.....	1 00
Mrs. Clara G. Fogle.....	Mt. Gilead, O.	Best eyelet embroidery.....	2 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.	2d best eyelet embroidery.....	1 00
Mrs. J. S. Wrinkle.....	1257 E. Long St., Columbus, O.	Best French embroidery.....	2 00
Celia Busser.....	Piqua, O., Box 34.	2d best French embroidery.....	1 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	Best Repousse embroidery.....	2 00
Mrs. Earl Peters.....	927 Liberty St., Ft. Wayne, Ind.	2d best Repousse embroidery.....	1 00
Mrs. Geo. Malay.....	137 Sherman Ave., Columbus, O.	Best drawn work.....	2 00
Mrs. A. C. Eggert.....	1306 Forsythe Ave., Columbus, O.	2d best drawn work.....	1 00
Mrs. L. C. Covault.....	Mechanicsburg, O.	Best Raffia.....	2 00
Mrs. Louise Kibbe.....	1403 Huron St., Toledo, O.	2d best Raffia.....	1 00
Fanny Fearn.....	Groveport, O.	Best silk embroidery.....	2 00
Mrs. E. Buck.....	415 Arlington Ave., Lockland, O.	2d best silk embroidery.....	1 00
Mrs. L. E. Rockwell.....	2069 Cedar St., Quincy, Ill.	Best decorative art.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best decorative art.....	1 00
DECORATIVE ART WORK—AMATEUR.			
Mrs. Ed. Greiner.....	73 E. William St., Delaware, O.	Best picture frame.....	\$2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best picture frame.....	1 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	Best handkerchief case or box.....	2 00
Robin Wood.....	1194 Fair Ave., Columbus, O.	2d best handkerchief case or box.....	1 00
Mrs. Marguerite Essig.....	311 Marion St., Canton, O.	Best glove case or box.....	2 00
Grace B. Matson.....	Ashtabula, O.	2d best glove case or box.....	1 00
L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	Best jewel case or chest.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best jewel case or chest.....	1 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best book cover.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best book cover.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best magazine cover.....	2 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	2d best magazine cover.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best photograph case.....	2 00
Mrs. R. T. Bates.....	115 N. Broadway, Dayton, O.	2d best photograph case.....	1 00
Marian Bright.....	174 Hamilton Ave., Columbus, O.	Best desk set.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best set.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best opera bag.....	2 00
Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.	2d best opera bag.....	1 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best shopping bag.....	2 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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DECORATIVE ART WORK—AMATEUR—Concluded.

L. V. Johnson.....	142 S. Jefferson St., Dayton, O.	2d best shopping bag.....	\$1 00
Marian Bright.....	174 Hamilton Ave., Columbus, O.	Best stencil or fabric.....	2 00
Miss Rachel M. Smith.....	Trinway, O., R. 1.....	2d best stencil or fabric.....	1 00
Miss L. P. Warman.....	2727 Harris Ave., Norwood, O.	Best tapestry painting.....	3 00
Grace B. Matson.....	Ashtabula, O.....	2d best tapestry painting.....	2 00

CHINA PAINTING—AMATEUR.

Mrs. Hulda Scott.....	S. Main St., Kenton, O.	Best 6 large plates.....	\$4 00
Louise Zumkeller.....	322 3d Ave., Dayton, O.	2d best 6 large plates.....	2 00
Louise Zumkeller.....	322 3d Ave., Dayton, O.	Best teapot, sugar and cream.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best teapot, sugar and cream.....	2 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Dayton, O.	Best chop tray.....	4 00
Mrs. F. E. Howell.....	Dayton, O.	2d best chop tray.....	2 00
Mrs. A. W. Tompkins.....	2264 N. Delaware St., Indianapolis, Ind.	Best cake plate.....	4 00
Mrs. F. E. Howell.....	Dayton, O.	2d best cake plate.....	2 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best tankard.....	4 00
Mrs. C. M. Rambo.....	Zanesville, O.	2d best tankard.....	2 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best plaque.....	4 00
Mrs. Wm. Banning, Jr.....	200 W High St., Mt. Vernon, O.	2d best plaque.....	2 00
Myrtle McCoy.....	Washington C. H., O.	Best vase.....	4 00
Mrs. R. K. Wilson.....	Rennerdale, Pa.	2d best vase.....	2 00
Mrs. Hulda Scott.....	S. Main St., Kenton, O.	Best salad dish.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best salad dish.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best bon-bon dish.....	4 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Dayton, O.	2d best bon-bon dish.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best nut bowl.....	4 00
Mrs. Hulda Scott.....	S. Main St., Kenton, O.	2d best nut bowl.....	2 00
Mrs. Hulda Scott.....	S. Main St., Kenton, O.	Best pair candlesticks.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best pair candlesticks.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	Best display 5 pieces.....	25 00
Myrtle McCoy.....	Washington C. H., O.	2d best display 5 pieces.....	15 00

Naturalistic.

Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best chocolate set.....	\$4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best chocolate set.....	2 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	Best 6 large plates.....	4 00
Lulu Fuller.....	895 Dennison Ave., Columbus, O.	2d best 6 large plates.....	2 00
Ivy A. Gerhart.....	Van Wert, O.	Best 6 small plates.....	4 00
Mrs. Hulda Scott.....	S. Main St., Kenton, O.	2d best 6 small plates.....	2 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	Best 6 cups and saucers.....	4 00
Mrs. F. E. Howell.....	Dayton, O.	2d best 6 cups and saucers.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	Best teapot, sugar and cream.....	4 00
Mrs. Hulda Scott.....	S. Main St., Kenton, O.	2d best teapot, sugar and cream.....	2 00
Mrs. Anna Andes.....	218 Wallace St., Marion, O.	Best chop tray.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best chop tray.....	2 00
Mrs. Anna Andes.....	218 Wallace St., Marion, O.	Best cake plate.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best cake plate.....	2 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best salad dish.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Columbus, O.	2d best salad dish.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best pitcher.....	4 00
Mrs. O. K. Howland.....	Plain City, O.	2d best pitcher.....	2 00
Mrs. C. M. Rambo.....	Zanesville, O.	Best tankard or claret pitcher, etc.....	4 00
Mrs. A. C. Naragon.....	Canal Dover, O.	2d best tankard or claret pitcher, etc.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	Best punch bowl.....	4 00
Cornelia Howard.....	725 S. Champion Ave., Columbus, O.	2d best punch bowl.....	2 00
Lulu Fuller.....	895 Dennison Ave., Columbus, O.	Best tray.....	4 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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CHINA PAINTING—AMATEUR—Continued.

Naturalistic—Concluded.

Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best tray.....	\$2 30
Mrs. G. E. Brittain.....	900 Manhattan Ave. Day- ton, O.	Best plaque.....	4 00
Cornelia Howard.....	725 S. Champion Ave., Co- lumbus, O.	2d best plaque.....	2 00
Mary Godard.....	1038 Oak St., Colum- bus, O.	Best vase.....	4 00
Cornelia Howard.....	725 S. Champion Ave., Columbus, O.	2d best vase.....	2 00
Cornelia Howard.....	725 S. Champion Ave., Columbus, O.	Best jardiniere.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best jardiniere.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	Best fern dish.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best fern dish.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best display 5 pieces.....	20 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best display 5 pieces.....	10 00

Figure Work.

Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best portrait.....	\$4 00
Mrs. A. W. Tompkins.....	2264 Delaware St., Indian- apolis, Ind.	2d best portrait.....	2 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Day- ton, O.	Best miniature.....	4 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	2d best miniature.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best plaque.....	4 00
Mrs. A. W. Tompkins.....	2264 N. Delaware St., In- dianapolis, Ind.	2d best plaque.....	2 00
Mrs. A. W. Tompkins.....	2264 N. Delaware St., In- dianapolis, Ind.	Best panel.....	4 00
Amelia E. Ludwig.....	423 S. Champion Ave., Co- lumbus, O.	2d best panel.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best vase.....	4 00
Mrs. A. W. Tompkins.....	2264 N. Delaware St., In- dianapolis, Ind.	2d best vase.....	2 00
Mrs. A. W. Tompk'n.....	2264 N. Delaware St., In- dianapolis, Ind.	2d best stein.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	2d best tankard.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best bon-bon dish.....	4 00
Virginia Wiltberger.....	Columbus, O.	2d best bon-bon dish.....	2 00
Mrs. Anna Andes.....	218 Wallace St., Marion, O.	Best belt buckle.....	4 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	2d best belt buckle.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	2d best display 5 pieces.....	10 00

CHINA PAINTING—PROFESSIONAL.

Conventional.

Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best punch bowl.....	\$4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best lemonade pitcher.....	4 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	2d best lemonade pitcher.....	2 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best plaque.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Colum- bus, O.	2d best plaque.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best chop tray.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best chop tray.....	2 00
Florence R. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.	Best nut bowl.....	4 00
Eva B. Mosttler.....	Newark, O.	2d best nut bowl.....	2 00
Eva B. Mosttler.....	Newark, O.	Best marmelade jar.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Colum- bus, O.	2d best marmalade jar.....	2 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
CHINA PAINTING—PROFESSIONAL—Continued.			
Conventional—Concluded.			
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best tankard or claret, etc.....	\$4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	2d best tankard or claret, etc.....	2 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best vase.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	2d best vase.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best 6 cups and saucers.....	4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best 6 large plates.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	2d best 6 large plates.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best 6 small plates.....	4 00
Eva B. Mosteller.....	Newark, O.	2d best 6 small plates.....	2 00
Eva B. Mosteller.....	Newark, O.	Best specimen of enamel.....	4 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	2d best specimen of enamel.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best specimen of paste work.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	2d best specimen of paste work.....	2 00
Florence P. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.	Best display, 6 pieces.....	25 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best display, 6 pieces.....	15 00

Naturalistic.

Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best punch bowl.....	\$4 00
Mrs. E. Wiltberger.....	Columbus, O.	2d best punch bowl.....	2 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best lemonade pitcher.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best lemonade pitcher.....	2 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best panel.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	2d best panel.....	2 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	Best plaque.....	4 00
Mrs. Belle Shook.....	625 S. Main St., Kenton, O.	2d best plaque.....	2 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	Best chop tray.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best chop tray.....	2 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	Best nut bowl.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best nut bowl.....	2 00
Mrs. E. Wiltberger.....	Columbus, O.	Best marmalade jar.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	Best tankard or claret pitcher, etc.....	4 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	2d best tankard or claret pitcher, etc.....	2 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	Best vase.....	4 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	2d best vase.....	2 00
Miss Elizabeth Leigh.....	Groveport, O.	Best 6 cups and saucers.....	4 00
Mrs. E. Wiltberger.....	Columbus, O.	2d best 6 cups and saucers.....	2 00
G. Beyerly.....	Chillicothe, O.	Best 6 large plates.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best 6 large plates.....	2 00
Miss Elizabeth Leigh.....	Groveport, O.	Best 6 small plates.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best 6 small plates.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best specimen of enamel.....	4 00
Mary W. Russell.....	441 E. Grand Ave., Spring- field, O.	2d best specimen of enamel.....	2 00
Regina Tyner.....	305 S. Main St., Marion, O.	Best specimen of paste work.....	4 00
Mary W. Russell.....	441 E. Grand Ave., Spring- field, O.	2d best specimen of paste work.....	2 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	Best display, 6 pieces.....	20 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best display, 6 pieces.....	10 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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CHINA PAINTING—AMATEUR—Continued.

Naturalistic—Concluded.

Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best tray.....	\$2 30
Mrs. G. E. Brittain.....	900 Manhattan Ave. Day- ton, O.	Best plaque.....	4 00
Cornelia Howard.....	725 S. Champion Ave., Co- lumbus, O.	2d best plaque.....	2 00
Mary Godard.....	1038 Oak St., Colum- bus, O.	Best vase.....	4 00
Cornelia Howard.....	725 S. Champion Ave., Columbus, O.	2d best vase.....	2 00
Cornelia Howard.....	725 S. Champion Ave., Columbus, O.	Best jardiniere.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best jardiniere.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	Best fern dish.....	4 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best fern dish.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best display 5 pieces.....	20 00
Mrs. Frances Peck.....	1369 Forsythe Ave., Co- lumbus, O.	2d best display 5 pieces.....	10 00

Figure Work.

Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best portrait.....	\$4 00
Mrs. A. W. Tompkins...	2264 Delaware St., Indian- apolis, Ind.	2d best portrait.....	2 00
Mrs. G. E. Brittan.....	900 Manhattan Ave., Day- ton, O.	Best miniature.....	4 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	2d best miniature.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best plaque.....	4 00
Mrs. A. W. Tompkins...	2264 N. Delaware St., In- dianapolis, Ind.	2d best plaque.....	2 00
Mrs. A. W. Tompkins...	2264 N. Delaware St., In- dianapolis, Ind.	Best panel.....	4 00
Amelia E. Ludwig.....	423 S. Champion Ave., Co- lumbus, O.	2d best panel.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best vase.....	4 00
Mrs. A. W. Tompkins...	2264 N. Delaware St., In- dianapolis, Ind.	2d best vase.....	2 00
Mrs. A. W. Tompk'nr...	2264 N. Delaware St., In- dianapolis, Ind.	2d best stein.....	2 00
Mrs. F. E. Howell.....	Dayton, O.	2d best tankard.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	Best bon-bon dish.....	4 00
Virginia Wiltberger.....	Columbus, O.	2d best bon-bon dish.....	2 00
Mrs. Anna Andes.....	218 Wallace St., Marion, O.	Best belt buckle.....	4 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	2d best belt buckle.....	2 00
Amelia E. Ludwig.....	423 S. Champion Ave., Columbus, O.	2d best display 5 pieces.....	10 00

CHINA PAINTING—PROFESSIONAL.

Conventional.

Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best punch bowl.....	\$4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best lemonade pitcher.....	4 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	2d best lemonade pitcher.....	2 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis Ind.	Best plaque.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Colum- bus, O.	2d best plaque.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best chop tray.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best chop tray.....	2 00
Florence R. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.	Best nut bowl.....	4 00
Eva B. Mostler.....	Newark, O.	2d best nut bowl.....	2 00
Eva B. Mostler.....	Newark, O.	Best marmelade jar.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Colum- bus, O.	2d best marmelade jar.....	2 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
CHINA PAINTING—PROFESSIONAL—Continued.			
Conventional—Concluded.			
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best tankard or claret, etc.....	\$4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	2d best tankard or claret, etc.....	2 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best vase.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	2d best vase.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best 6 cups and saucers.....	4 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best 6 large plates.....	4 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	2d best 6 large plates.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best 6 small plates.....	4 00
Eva B. Mosteller.....	Newark, O.	2d best 6 small plates.....	2 00
Eva B. Mosteller.....	Newark, O.	Best specimen of enamel.....	4 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	2d best specimen of enamel.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best specimen of paste work.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	2d best specimen of paste work.....	2 00
Florence P. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.	Best display, 6 pieces.....	25 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best display, 6 pieces.....	15 00
Naturalistic.			
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	Best punch bowl.....	\$4 00
Mrs. E. Wiltberger.....	Columbus, O.	2d best punch bowl.....	2 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best lemonade pitcher.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best lemonade pitcher.....	2 00
Mrs. A. F. Emminger.....	880 E. Broad St., Colum- bus, O.	Best panel.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian- apolis, Ind.	2d best panel.....	2 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	Best plaque.....	4 00
Mrs. Belle Shook.....	625 S. Main St., Kenton, O.	2d best plaque.....	2 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	Best chop tray.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best chop tray.....	2 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	Best nut bowl.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best nut bowl.....	2 00
Mrs. E. Wiltberger.....	Columbus, O.	Best marmalade jar.....	4 00
Regina Tyner.....	305 S. Main St., Marion, O.	Best tankard or claret pitcher, etc.....	4 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	2d best tankard or claret pitcher, etc.....	2 00
Mrs. H. L. Cowser.....	383 12th Ave., Columbus, O.	Best vase.....	4 00
Mrs. Esther D. Gaskell.....	230 W. 8th St., Canton, O.	2d best vase.....	2 00
Miss Elizabeth Leigh.....	Groveport, O.	Best 6 cups and saucers.....	4 00
Mrs. E. Wiltberger.....	Columbus, O.	2d best 6 cups and saucers.....	2 00
G. Beyerly.....	Chillicothe, O.	Best 6 large plates.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best 6 large plates.....	2 00
Miss Elizabeth Leigh.....	Groveport, O.	Best 6 small plates.....	4 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	2d best 6 small plates.....	2 00
Meta Earnest.....	1059 E. Long St., Colum- bus, O.	Best specimen of enamel.....	4 00
Mary W. Russell.....	441 E. Grand Ave., Spring- field, O.	2d best specimen of enamel.....	2 00
Regina Tyner.....	305 S. Main St., Marion, O.	Best specimen of paste work.....	4 00
Mary W. Russell.....	441 E. Grand Ave., Spring- field, O.	2d best specimen of paste work.....	2 00
Mrs. Della Porter.....	769 Neil Ave., Columbus, O.	Best display, 6 pieces.....	20 00
Regina Tyner.....	305 S. Main St., Marion, O.	2d best display, 6 pieces.....	10 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
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CHINA PAINTING—PROFESSIONAL—Concluded.

Figure Work.

Mrs. E. R. Skillman.....	113 S. Boulevard, Day-	Best portrait.....	\$4 00
Miss Elizabeth Leigh.....	ton, O.....	2d best portrait.....	2 00
G. Beyerly.....	Groveport, O.....	Best miniature.....	4 00
Mrs. E. R. Skillman.....	113 S. Boulevard, Day-	2d best miniature.....	2 00
G. Beyerly.....	ton, O.....	Best plaque.....	4 00
Miss Elizabeth Leigh.....	Chillicothe, O.....	2d best plaque.....	2 00
G. Beyerly.....	Groveport, O.....	Best panel.....	4 00
Mrs. E. P. Sampson.....	1103 Pennsylvania Ave.,	2d best panel.....	2 00
Mrs. E. R. Skillman.....	Columbus, O.....	Best vase.....	4 00
Mrs. Wm. Welch.....	113 S. Boulevard, Day-	2d best vase.....	2 00
Mrs. A. P. Emminger.....	ton, O.....	Best stein.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian-	2d best stein.....	2 00
Mrs. E. R. Skillman.....	apolis, Ind.....	Best tankard.....	4 00
Mrs. Wm. Welch.....	113 S. Boulevard, Day-	2d best tankard.....	2 00
Mrs. Wm. Welch.....	ton, O.....	Best bon-bon dish.....	4 00
Mrs. E. R. Skillman.....	2339 Broadway, Indian-	2d best bon-bon dish.....	2 00
G. Byerly.....	apolis, Ind.....	Best belt buckle.....	4 00
Mrs. Wm. Welch.....	2339 Broadway, Indian-	2d best belt buckle.....	2 00
Miss Elizabeth Leigh.....	apolis, Ind.....	Best display, 5 pieces.....	20 00
G. Byerly.....	Groveport, O.....	2d best display, 5 pieces.....	10 00
	Chillicothe, O.....		

ART NEEDLE WORK FOR PROFESSIONALS.

Mrs. W. A. Forbes.....	246 Marshall Ave., Co-	Best table set.....	\$7 00
Mrs. R. W. Priest.....	lumbus, O.....	2d best table set.....	5 00
Cora L. Creamer.....	365 W. 4th Ave., Colum-	Best lunch cloth (36 in.).....	5 00
Mrs. W. A. Forbes.....	bus, O.....	2d best lunch cloth (36 in.).....	3 00
Mrs. W. A. Forbes.....	246 Marshall Ave., Co-	Best centerpiece (24 in.).....	3 00
Cora L. Creamer.....	lumbus, O.....	2d best centerpiece (24 in.).....	2 00
Mrs. W. A. Forbes.....	671 S. Main St., Dayton, O.	Best party bag.....	3 00
Mrs. W. A. Forbes.....	246 Marshall Ave., Co-	Best towel.....	3 00
Cora L. Creamer.....	lumbus, O.....	2d best towel.....	2 00
Mrs. R. W. Priest.....	671 S. Main St., Day-	Best sheet.....	3 00
Mrs. W. A. Forbes.....	ton, O.....	2d best sheet.....	2 00
Cora L. Creamer.....	246 Marshall Ave., Co-	Best pair pillow cases.....	3 00
Mrs. R. W. Priest.....	lumbus, O.....	2d best pair pillow cases.....	2 00
Cora L. Creamer.....	365 W. 4th Ave., Colum-	Best single specimen.....	3 00
Mrs. R. W. Priest.....	bus, O.....	2d best single specimen.....	2 00
Mrs. R. W. Priest.....	365 W. 4th Ave., Colum-	Best display.....	10 00
Mrs. W. A. Forbes.....	bus, O.....	2d best display.....	5 00
	246 Marshall Ave., Co-		
	lumbus, O.....		

WOMAN'S WORK—Continued.
PRESERVES, PICKLES, ETC.

Name.	Postoffice.	Awards.	Amount.
Mrs. Geo. Lee	Canal Winchester, O.	Best canned tomatoes	\$1 00
Mrs. Laura Gregg	Washington C. H., O.	2d best canned tomatoes	50
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	Best canned blackberries	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned blackberries	50
Mrs. M. B. Clutter	Pataskala, O.	Best canned raspberries	1 00
H. E. Stewart	Thornville, O.	2d best canned raspberries	50
Mrs. M. B. Clutter	Pataskala, O.	Best canned peaches	1 00
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	2d best canned peaches	50
Mrs. Geo. Lee	Canal Winchester, O.	Best canned pears	1 00
Mrs. Laura Gregg	Washington C. H., O.	2d best canned pears	50
Mrs. Laura Gregg	Washington C. H., O.	Best canned pineapples	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned pineapples	50
H. E. Stewart	Thornville, O.	Best canned apples	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned apples	50
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	Best canned quinces	1 00
Mary Steward	Jacksontown, O.	2d best canned quinces	50
H. E. Stewart	Thornville, O.	Best canned strawberries	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned strawberries	50
Mrs. Geo. Lee	Canal Winchester, O.	Best canned cherries	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned cherries	50
Mrs. Geo. Lee	Canal Winchester, O.	Best canned gooseberries	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned gooseberries	50
Mary Steward	Jacksontown, O.	Best canned huckleberries	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned huckleberries	50
H. E. Stewart	Thornville, O.	Best canned elderberries	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned elderberries	50
Mary Steward	Jacksontown, O.	Best canned currants	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned currants	50
Mrs. Laura Gregg	Washington C. H., O.	Best canned grapes	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned grapes	50
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	Best canned plums	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned plums	50
Mrs. M. B. Clutter	Pataskala, O.	Best canned beans	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best canned beans	50
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	Best canned rhubarb	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned rhubarb	50
Mrs. R. R. Barnhart	Grafton, O.	Best canned corn	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best canned corn	50
Mrs. Geo. Lee	Canal Winchester, O.	Best blackberry jelly	1 00
Mrs. A. C. Eggert	1305 Forsythe Ave., Columbus, O.	2d best blackberry jelly	50
Grace B. Matson	Ashtabula, O.	Best cherry jelly	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best cherry jelly	50
Mrs. M. B. Clutter	Pataskala, O.	2d best cranberry jelly	50
Mrs. A. C. Eggert	1305 Forsythe Ave., Columbus, O.	Best grape jelly	1 00
Mrs. J. M. Blue	167 W. 9th Ave., Columbus, O.	2d best grape jelly	50
Mrs. M. B. Clutter	Pataskala, O.	Best raspberry jelly	1 00
Mrs. R. R. Barnhart	Grafton, O.	2d best raspberry jelly	50
Mrs. M. B. Clutter	Pataskala, O.	Best strawberry jelly	1 00
Grace B. Matson	Ashtabula, O.	2d best strawberry jelly	50
Miss Annie Richards	1372 Eastwood Ave., Columbus, O.	Best apple jelly	1 00
Mrs. Gomer Richards	100 N. Ohio Ave., Columbus, O.	2d best apple jelly	50
Grace B. Matson	Ashtabula, O.	Best pear jelly	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best pear jelly	50
Miss Ruth Bowman	46 W. 10th Ave., Columbus, O.	Best crab apple jelly	1 00
Mrs. Geo. Lee	Canal Winchester, O.	2d best crab apple jelly	50
Mrs. Laura Gregg	Washington C. H., O.	Best currant jelly	1 00
Anna N. Scott	1274 Summit St., Columbus, O.	Best peach jelly	1 00
Grace B. Matson	Ashtabula, O.	2d best peach jelly	50
Mrs. M. B. Clutter	Pataskala, O.	Best quince jelly	1 00
Mrs. C. S. Armstrong	37 W. 3d Ave., Columbus, O.	2d best quince jelly	50
Mrs. Wm. A. Himmeger	667 Park St., Marion, O.	Best plum jelly	1 00
Mrs. J. M. Blue	167 W. 9th Ave., Columbus, O.	2d best plum jelly	50
Mrs. M. B. Clutter	Pataskala, O.	Best lemon jelly	1 00
Ella M. Preston	East Akron, O., R. 20	2d best lemon jelly	50
Mrs. Geo. Lee	Canal Winchester, O.	Best pineapple jelly	1 00
Ella M. Preston	East Akron, O., R. 20	2d best pineapple jelly	50
Grace B. Matson	Ashtabula, O.	Best rhubarb jelly	1 00
Mrs. M. B. Clutter	Pataskala, O.	2d best rhubarb jelly	50
Fanny Fearn	Groveport, O.	Best gooseberry jelly	1 00
Mrs. Wm. A. Himmeger	677 Park St., Marion, O.	2d best gooseberry jelly	50
Mrs. Geo. Lee	Canal Winchester, O.	Best preserved quinces	2 00
Mrs. H. Bieber	Delaware, O., R. 3	2d best preserved quinces	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
PRESERVES, PICKLES, ETC.—Continued.			
Mrs. H. Bieber.....	Delaware, O., R. 3.....	Best preserved pears.....	\$2 00
Mrs. Wm. Himmeger.....	677 Park St., Marion, O.....	2d best preserved pears.....	1 00
H. E. Stewart.....	Thornville, O.....	Best preserved apples.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best preserved apples.....	1 00
Fanny Fearn.....	Groveport, O.....	Best preserved plums.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best preserved plums.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best preserved cherries.....	2 00
Fanny Fearn.....	Groveport, O.....	2d best preserved cherries.....	1 00
Mary Steward.....	Jacksontown, O.....	Best preserved crabapples.....	2 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	2d best preserved crabapples.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best preserved grapes.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best preserved grapes.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best preserved strawberries.....	2 00
Fanny Fearn.....	Groveport, O.....	2d best preserved strawberries.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best preserved blackberries.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best preserved blackberries.....	1 00
Mary Steward.....	Jacksontown, O.....	Best preserved peaches.....	2 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	2d best preserved peaches.....	1 00
Fanny Fearn.....	Groveport, O.....	Best preserved currants.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best preserved currants.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best preserved gooseberries.....	2 00
Mrs. A. B. Clutter.....	Pataskala, O.....	2d best preserved gooseberries.....	1 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.....	Best preserved melons.....	2 00
H. E. Stewart.....	Thornville, O.....	2d best preserved melons.....	1 00
Mary Steward.....	Jacksontown, O.....	Best preserved pineapples.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best preserved pineapples.....	1 00
H. E. Stewart.....	Thornville, O.....	Best preserved cranberries.....	2 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	2d best preserved cranberries.....	1 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	Best pickled cucumbers.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled cucumbers.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best pickled cabbage.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled cabbage.....	1 00
Mrs. Frank W. Jennings.....	61 W. 11th Ave., Columbus, O.....	Best pickled beets.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best pickled beets.....	1 00
H. E. Stewart.....	Thornville, O.....	Best pickled peaches.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled peaches.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best pickled pears.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best pickled pears.....	1 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	Best pickled tomatoes.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best pickled tomatoes.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best pickled melon mangoes.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled melon mangoes.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best pickled pepper mangoes.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled pepper mangoes.....	1 00
Mrs. Frank M. Jennings.....	61 W. 11th Ave., Columbus, O.....	Best pickled melons.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best pickled melons.....	1 00
H. E. Stewart.....	Thornville, O.....	Best pickled onions.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best pickled onions.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best pickled gherkins.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best pickled gherkins.....	1 00
Mary Steward.....	Jacksontown, O.....	Best pickled cauliflower.....	2 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	2d best pickled cauliflower.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best mixed pickles.....	2 00
H. E. Stewart.....	Thornville, O.....	2d best mixed pickles.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best tomato catsup.....	2 00
Mrs. A. C. Eggert.....	1305 Forsythe Ave., Columbus, O.....	2d best tomato catsup.....	1 00
H. E. Stewart.....	Thornville, O.....	Best cucumber catsup.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best cucumber catsup.....	1 00
Mrs. H. W. Walter.....	Lancaster, O.....	Best cold tomato catsup.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best cold tomato catsup.....	1 00
Mrs. Louise J. Housel.....	1305 Forsythe Ave., Columbus, O.....	Best chili sauce.....	2 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	2d best chili sauce.....	1 00
Mrs. H. B. Clutter.....	Pataskala, O.....	Best chow-chow.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best chow-chow.....	1 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	Best cucumber relish.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best cucumber relish.....	50
Mrs. H. Bieber.....	Delaware, O., R. 3.....	Best peach butter.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best peach butter.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best apple butter.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best apple butter.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best quince butter.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best quince butter.....	1 00
Mrs. F. W. Jennings.....	61 W. 11th Ave., Columbus, O.....	Best tomato butter.....	2 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	2d best tomato butter.....	1 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
PRESERVES, PICKLES, ETC.—Concluded.			
Mrs. M. B. Clutter.....	Pataskala, O.....	Best plum butter.....	\$2 00
Fanny Fearn.....	Groveport, O.....	2d best plum butter.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best pear butter.....	2 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d best pear butter.....	1 00
Mary Steward.....	Jacksontown, O.....	Best grape butter.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best grape butter.....	1 00
H. E. Steward.....	Thornville, O.....	Best peach marmalade.....	2 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	2d best peach marmalade.....	1 00
Mrs. Mm. A. Himmeger.....	677 Park St., Marion, O.....	Best quince marmalade.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best quince marmalade.....	1 00
H. E. Stewart.....	Thornville, O.....	Best crabapple marmalade.....	2 00
Mrs. H. Bieber.....	Delaware, O., R. 3.....	2d best crabapple marmalade.....	1 00
Mrs. Frank W. Jennings.....	61 W. 11th Ave., Columbus, O.....	Best orange marmalade.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best orange marmalade.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best pear marmalade.....	2 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	2d best pear marmalade.....	1 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Largest and best variety canned fruit.....	5 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d largest and best variety canned fruit.....	3 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Largest and best variety pickles.....	5 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d largest and best variety pickles.....	3 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Largest and best variety jellies.....	5 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d largest and best variety jellies.....	5 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Largest and best variety preserves.....	5 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	2d largest and best variety preserves.....	3 00
Mrs. Geo. Lee.....	Canal Winchester, O.....	Best display of butter.....	5 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best display of butter.....	3 00
Mary Steward.....	Jacksontown, O.....	Best display marmalades.....	5 00
Mrs. H. Bieber.....	Delaware, O.....	2d best display marmalades.....	3 00

CEREAL FOODS.

Name.	Postoffice.	Awards.	Amount.
DOMESTIC BAKING.			
Mary Steward.....	Jacksontown, O.....	Best yeast bread.....	\$5 00
Miss Mary Seligue.....	310 W. Vine St., Mt. Vernon, O.....	2d best yeast bread.....	3 00
Mrs. M. B. Clutter.....	Pataskala, O.....	3d best yeast bread.....	2 00
Laura A. Larkin.....	S. Charleston, O.....	Best salt rising bread.....	3 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best salt rising bread.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best corn bread.....	2 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	2d best corn bread.....	1 00
Mary Steward.....	Jacksontown, O.....	Best rye bread.....	2 00
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.....	2d best rye bread.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best steamed brown bread.....	2 00
H. E. Stewart.....	Thornville, O.....	2d best steamed brown bread.....	1 00
Laura A. Larkin.....	S. Charleston, O.....	Best graham bread.....	2 00
Mary Steward.....	Jacksontown, O.....	2d best graham bread.....	1 00

LOAF CAKES.

Mary Steward.....	Jacksontown, O.....	Best black fruit.....	\$3 00
Ella M. Preston.....	E. Akron, O., R. 20.....	2d best black fruit.....	2 00
H. E. Stewart.....	Thornville, O.....	Best white fruit.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best white fruit.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	Best white.....	2 00
Ella M. Preston.....	E. Akron, O., R. 20.....	2d best white.....	1 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	Best marble.....	2 00
Mrs. H. W. Walter.....	Lancaster, O.....	2d best marble.....	1 00
Mary Steward.....	Jacksontown, O.....	2d best pound.....	1 00
Mrs. C. S. Armstrong.....	37 W. 3d Ave., Columbus, O.....	Best coffee.....	2 00
Mrs. M. B. Clutter.....	Pataskala, O.....	2d best coffee.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.....	Best nut.....	2 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincinnati, O.....	2d best nut.....	1 00
Fanny E. Boyd.....	120 Lane Ave., Columbus, O.....	Best angel.....	3 00
Mrs. Grace Millar.....	Ashville, O., R. 4.....	2d best angel.....	2 00

WOMAN'S WORK—Continued.

Name.	Postoffice.	Awards.	Amount.
LOAF CAKES—Concluded.			
Mrs. C. S. Armstrong.....	37 W. 3d Ave., Colum- bus, O.	Best sponge.....	\$2 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincin- nat., O.	2d best sponge.....	1 00
Ella M. Preston.....	E. Akron, O., R. 20.	Best sunshine.....	2 00
Mrs. A. P. Smith.....	1401 Chase Ave., Cincin- nat., O.	2d best sunshine.....	1 00

LAYER CAKES.

Mrs. M. B. Cutter.....	Pataskala, O.	Best choco ate.....	\$2 00
Mrs. H. W. Walter.....	Lancaster, O.	2d best chocolate.....	1 00
Mrs. H. W. Walter.....	Lancaster, O.	Best caramel.....	2 00
H. E. Stewart.....	Thornville, O.	2d best caramel.....	1 00
Mrs. H. T. VanHorn.....	653 E. 5th St., Milo, O.	Best cocoanut.....	2 00
Mary Steward.....	Jacksontown, O.	2d best cocoanut.....	1 00
Mrs. C. S. Armstrong.....	37 W. 3d Ave., Columbus O.	Best almond.....	2 00
Mrs. H. W. Walter.....	Lancaster, O.	2d best almond.....	1 00
Mrs. C. S. Armstrong.....	37 W. 3d Ave., Colum- bus O.	Best devil.....	2 00
Anna M. Scott.....	1274 Summit St., Colum- bus, O.	2d best devil.....	1 00
Mrs. H. W. Walter.....	Lancaster, O.	Best fig.....	2 00
Mrs. C. S. Armstrong.....	37 W. 3d Ave., Colum- bus, O.	2d best fig.....	1 00
Mary Steward.....	Jacksontown, O.	Best ribbon.....	2 00
Mrs. H. W. Walter.....	Lancaster, O.	2d best ribbon.....	1 00
Miss Ruth Bowman.....	46 W. 10th Ave., Colum- bus, O.	Best plain white.....	2 00
Miss Ruth Francis.....	Grove City, O.	2d best plain white.....	1 00
Miss Ruth Bowman.....	46 W. 10th Ave., Colum- bus, O.	Best any other kind.....	2 00
Mrs. W. H. Walter.....	Lancaster, O.	2d best any other kind.....	1 00

MISCELLANEOUS

Anna N. Scott.....	1274 Summit St., Colum- bus, O.	Best 12 plain snaps.....	\$1 00
Mrs. M. B. Clutter.....	Pataskala, O.	2d best 12 plain snaps.....	50
Mrs. Fred Killets.....	2492 Findley Ave., Co- lumbus, O.	Best 12 cookies.....	1 00
Mrs. H. T. VanHorn.....	653 E. 5th Ave., Milo, O.	2d best 12 cookies.....	50
Fanny E. Boyd.....	120 W. Lane Ave., Co- lumbus, O.	Best 12 doughnuts.....	1 00
Mrs. W. H. Jennings.....	196 W. 6th Ave., Colum- bus, O.	2d best 12 doughnuts.....	50
Mrs. M. B. Clutter.....	Pataskala, O.	Best 12 love pics.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.	Best 12 ginger snaps.....	1 00
H. E. Stewart.....	Thornville, O.	2d best 12 ginger snaps.....	50
Ella M. Preston.....	E. Akron, O., R. 20.	Best 12 small cakes with nuts or fruits.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.	2d best small cakes with nuts or fruits.....	50
Ella M. Preston.....	E. Akron, O., R. 20.	Best 12 small iced cakes.....	1 00
H. E. Stewart.....	Thornville, O.	2d best 12 small iced cakes.....	50

PIES.

Mrs. Frank W. Jennings.....	61 W. 11th Ave., Colum- bus, O.	Best lemon.....	\$1 00
Minnie Bieber.....	Delaware, O., R. 3.	2d best lemon.....	50
Mrs. Wm. A. Himmeger.....	677 Park St., Marion, O.	Best mince.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.	2d best mince.....	50
Mrs. H. W. Walter.....	Lancaster, O.	Best apple.....	1 00
Mrs. M. B. Clutter.....	Pataskala, O.	2d best apple.....	50
Mrs. H. W. Walter.....	Lancaster, O.	Best cocoanut cream.....	1 00
Minnie Bieber.....	Delaware, O., R. 3.	2d best cocoanut cream.....	50
Mrs. M. B. Clutter.....	Pataskala, O.	Best custard.....	1 00
Minnie Bieber.....	Delaware, O.	2d best custard.....	1 00
Mrs. H. W. Walker.....	Lancaster, O.	Best peach.....	1 00
Minnie Bieber.....	Delaware, O., R. 3.	2d best peach.....	50
Mrs. Fred Killets.....	2492 Findlay Ave. Colum- bus, O.	Best cherry.....	1 00
Minnie Bieber.....	Delaware, O., R. 3.	2d best cherry.....	50
Mrs. M. B. Clutter.....	Pataskala, O.	Best blackberry.....	1 00
Mrs. H. W. Walker.....	Lancaster, O.	2d best blackberry.....	50

WOMAN'S WORK—Concluded.

Name.	Postoffice.	Awards.	Amount.
CONFECTIONS—HOME MADE.			
Mrs. Frank W. Jennings.	61 W. 11th Ave., Colum-	Best French creams.....	\$1 00
	bus, O.....	2d best French creams.....	50
Mrs. Wm. A. Himmeger.	677 Park St., Marion, O ..		
Mrs. C. J. Rockey.....	27 E. Gambier St., Mt.	Best fudges.....	1 00
	Vernon, O.....		
Mrs. Frank W. Jennings.	61 W. 11th Ave., Colum-	2d best fudges.....	50
	bus, O.....	Best maple creams.....	1 00
Bartholomew & Shaw.....	Huntsburg, O.....		
Mrs. C. J. Rockey.....	27 E. Gambier St., Mt.	2d best maple creams.....	50
	Vernon, O.....		
Mrs. W. R. Foster.....	647 Oakwood Ave., Co-	Best chocolate creams.....	1 00
	lumbus, O.....	2d best chocolate creams.....	50
Ella M. Preston.....	East Akron, O., R. 20.....		
Mrs. C. J. Rockey.....	27 E. Gambier St., Mt.	Best nut candy.....	1 00
	Vernon, O.....	2d best nut candy.....	50
Mrs. Wm. A. Himmeger.	677 Park St., Marion, O ..	Best taffy.....	1 00
Mrs. Wm. A. Himmeger.	677 Park St., Marion, O ..	2d best taffy.....	50
Mary Steward.....	Jacksontown, O.....		
Miss Ruth Bowman.....	46 W. 10th Ave., Colum-	Best divinity fudges or sea foam	1 00
	bus, O.....		
Mrs. Frank W. Jennings..	61 W. 11th Ave., Colum-	2d best divinity fudges or sea foam.....	50
	bus, O.....	Best plain or nut caramels.....	1 00
Mrs. Wm. A. Himmeger..	677 Park St., Marion, O ..	2d best plain or nut caramels.....	50
Jessie Goodrich.....	Powell, O.....		
Mrs. Frank W. Jennings.	61 W. 11th Ave., Colum-	Best candied lemon or orange peel	1 00
	bus, O.....		
Anna N. Scott.....	1274 Summit St., Colum-	2d best candied lemon or orange peel.....	50
	bus, O.....		
Mrs. Frank W. Jennings.	61 W. 11th Ave., Colum-	Best almond macaroon.....	1 00
	bus, O.....	2d best almond macaroons.....	50
Mrs. H. Bieber.....	Delaware, O., R. 3.....	Best hickorynut macaroons.....	1 00
Minnie Bieber.....	Delaware, O., R. 3.....	2d best hickorynut macaroons.....	50
Mrs. Wm. A. Himmeger..	677 Park St., Marion, O ..		

TWELFTH DEPARTMENT—FINE ARTS.

T. E. Cromley, Member in Charge.

MRS. A. M. CROMLEY

Superintendent

JUDGE

ALMON C. WHITING.

Paid superintendent, judge, etc., 1912.....	\$229 30
Premiums offered, 1912.....	1,226 00
Premiums paid, 1912.....	1,167 00
Total number of entries, 1912—1,281.	

Paid superintendent, judge, etc., 1911.....	\$290 73
Premiums offered, 1911.....	798 00
Premiums paid, 1911.....	757 00
Total number of entries, 1911—1,012.	

Paid superintendent, judges, etc., 1910.....	\$134 00
Premiums offered, 1910.....	796 00
Premiums paid, 1910.....	666 00
Total number of entries, 1910—557.	

PAINTINGS, DRAWINGS, ETC—ORIGINAL PRODUCTIONS—OPEN TO ALL.

Name.	Postoffice.	Awards.	Amount.
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OIL PAINTINGS.

Mrs. A. C. Fawley.....	1427 Eastwood Ave. Co-	Best portrait.....	\$15 00
	lumbus, O.....		
Alice Schille.....	1166 Bryden Road, Co-	2d best portrait.....	10 00
	lumbus, O.....		
Ferol Sibley.....	103 W. Patterson Ave.,	3d best portrait.....	5 00
	Columbus, O.....		
Mrs. A. C. Fawley.....	1427 Eastwood Ave., Co-	Best landscape.....	15 00
	lumbus, O.....		
Mrs. A. C. Fawley.....	1427 Eastwood Ave., Co-	2d best landscape.....	10 00
	lumbus, O.....		
Alice Schille.....	1166 Bryden Road, Co-	3d best landscape.....	5 00
	lumbus, O.....		
Mrs. A. C. Fawley.....	1427 Eastwood Ave., Co-	Best study.....	15 00
	lumbus, O.....		
Alice Schille.....	1166 Bryden Road Co-	2d best study.....	10 00
	lumbus, O.....		
Fred N. Vance.....	414 W. Jefferson St.,	3d best study.....	5 00
	Crawfordsville, Ind.....		
Mrs. L. J. Pullian.....	1020 S. 7th St., Spring-	Best still life study.....	15 00
	field, Ill.....		
Ferol Sibley.....	103 W. Patterson Ave.,	2d best still life study.....	10 00
	Columbus, O.....		
Jno. M. Piersche.....	150 W. Maynard Ave.,	3d best still life study.....	5 00
	Columbus, O.....		
Alice Schille.....	1166 Bryden Road Co-	Best exhibit of oil paintings, 4 pieces not	
	lumbus, O.....	otherwise entered.....	50 00

WATER COLOR PAINTINGS.

Alice Schille.....	1166 Bryden Road, Co-	Best portrait.....	\$12 00
	lumbus, O.....		
Ferol Sibley.....	103 W. Patterson Ave.,	2d best portrait.....	8 00
	Columbus, O.....		
Jno. M. Piersche.....	150 W. Maynard Ave.,	3d best portrait.....	4 00
	Columbus, O.....		
Alice Schille.....	1166 Bryden Road, Co-	Best landscape.....	12 00
	lumbus, O.....	2d best landscape.....	8 00
Mable Arbuckle.....	Shepard, O.....		
Ferol Sibley.....	103 W. Patterson Ave.,	3d best landscape.....	4 00
	Columbus, O.....		
Amelia E. Ludwig.....	423 S. Champion Ave.,	Best still life study.....	12 00
	Columbus, O.....		
Ferol Sibley.....	103 W. Patterson Ave.,	2d best still life study.....	8 00
	Columbus, O.....		
A. L. B. Cheney.....	1344 E. 63d St., Chicago,	3d best still life study.....	4 00
	Ill.....		
Alice Schille.....	1166 Bryden Road, Co-	Best study.....	12 00
	lumbus, O.....	2d best study.....	8 00
Mable Arbuckle.....	Shepard, O.....		
Anna B. Lanman.....	1447 Fair Ave., Colum-	3d best study.....	4 00
	buss, O.....		

FINE ARTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
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WATER COLOR PAINTINGS—Concluded.

Mrs. W. A. Kirkpatrick	179 Chittenden Ave., Columbus, O.	Best marine study.....	\$12 00
Alice Schille	1166 Bryden Road, Columbus, O.	2d best marine study.....	8 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	3d best marine study.....	4 00
Alice Schille	1166 Bryden Road, Columbus, O.	Best exhibit of paintings in water colors, four pieces not otherwise entered.....	30 00

PASTELS.

Amelia Ludwig	423 S. Champion Ave., Columbus, O.	Best landscape.....	\$5 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	2d best landscape.....	3 00
Paul Green	Columbus, O., R. F. D. 5.	Best marine study.....	5 00
Amelia Ludwig	423 S. Champion Ave., Columbus, O.	2d best marine study.....	3 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	Best still life.....	5 00
Amelia Ludwig	423 S. Champion Ave., Columbus, O.	2d best still life.....	3 00
Amelia Ludwig	423 S. Champion Ave., Columbus, O.	Best study.....	5 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	2d best study.....	3 00
Mrs. F. D. Taylor	Springfield, Ill.	Best exhibit of pastels, four pieces, not otherwise entered.....	20 00

DRAWINGS.

Amelia Ludwig	423 S. Champion Ave., Columbus, O.	Best portrait, charcoal.....	\$5 00
Paul Green	Columbus, O., R. F. D. 5.	2d best portrait charcoal.....	3 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	Best still life, charcoal.....	5 00
Mrs. A. L. B. Cheney	1344 E. 63d St., Chicago, Ill.	2d best still life, charcoal.....	3 00
Amelia Ludwig	423 S. Champion Ave., Columbus, O.	Best pen and ink study.....	5 00
Mary W. Russell	441 E. Grand Ave., Springfield, O.	2d best pen and ink study.....	3 00
Paul Green	Columbus, O., R. F. D. 5.	Best pen and ink, still life.....	5 00
Mrs. A. L. B. Cheney	1344 E. 63d St., Chicago, Ill.	2d best pen and ink, still life.....	3 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	Best pencil drawing study.....	5 00
Paul Green	Columbus, O., R. F. D. 5.	2d best pencil drawing study.....	3 00
Ferol Sibley	103 W. Patterson Ave., Columbus, O.	Best exhibit of drawings, four pieces, not otherwise entered.....	20 00

OPEN TO AMATEURS ONLY.

Name of Owner.	Postoffice.	Awards.	Amount.
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OIL PAINTINGS.

Helen H. Osborn	Columbus, O., Sta. B., R. F. D. 7.	Best portrait.....	\$12 00
Ruth Corbin	425 Smead Ave., Columbus, O.	2d best portrait.....	8 00
Marion Bright	174 Hamilton Ave., Columbus, O.	3d best portrait.....	4 00
Donald Baker	Westerville, O.	Best landscape.....	12 00
Marian Bright	174 Hamilton Ave., Columbus, O.	2d best landscape.....	8 00
S. Kiefer	147 Maynard Ave., Columbus, O.	3d best landscape.....	4 00

FINE ARTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
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OIL PAINTINGS—Concluded.

Lillian Harmer.....	74 N. Monroe Ave., Co- lumbus, O.	Best still life study.....	\$12 00
Helen H. Osborn.....	Columbus, O., Sta. B. R. F. D. 7.....	Best study.....	12 00
Mary McGuier.....	1824 E. Broad St., Co- lumbus, O.	2d best study.....	8 00
Lillian Harmer.....	74 N. Monroe Ave., Co- lumbus, O.	3d best study.....	4 00
Cora R. Moore.....	2183 Cornell Road, Cleve- land, O.	Best exhibit of oil paintings, four pieces, not otherwise entered.....	30 00

WATER COLOR PAINTINGS.

L. R. Warthen.....	Shepard, O.	Best portrait.....	\$10 00
Ruth Corbin.....	425 Smead Ave., Colum- bus, O.	2d best portrait.....	5 00
Mary McGuier.....	1824 E. Broad St., Co- lumbus, O.	3d best portrait.....	3 00
R. K. Waters.....	Columbus, O., R. F. D. 5.	Best landscape.....	10 00
Marion Bright.....	174 Hamilton Ave., Co- lumbus, O.	2d best landscape.....	5 00
L. R. Warthen.....	Shepard, O.	3d best landscape.....	3 00
Mrs. W. A. Kirkpatrick..	179 Chittenden Ave., Co- lumbus, O.	Best marine study.....	10 00
Alma Shafe.....	Cambridge, O.	Best still life study.....	10 00
Lee R. Warthen.....	Shepard, O.	2d best still life study.....	5 00
Elizabeth Davis.....	1543 E. 51st St., Chicago, Ill.	3d best still life study.....	3 00
R. K. Waters.....	Columbus, O., R. F. D. 5.	Best study.....	10 00
Mary McGuier.....	1824 E. Broad St., Co- lumbus, O.	2d best study.....	5 00
Mrs. W. A. Kirkpatrick..	179 Chittenden Ave., Co- lumbus, O.	3d best study.....	3 00
Elizabeth Davis.....	1543 E. 51st St., Chicago, Ill.	Best exhibit of paintings in water colors, four pieces, not otherwise entered.....	20 00

PASTELS.

Marian Bright.....	174 Hamilton Ave., Co- lumbus, O.	Best landscape.....	\$3 00
Lillian Coler.....	83 W. Ninth Ave., Colum- bus, O.	Best still life.....	5 00
Mrs. J. A. Hopkins.....	902 Manhattan Ave., Day- ton, O.	2d best still life.....	3 00
Lillian Harmer.....	74 N. Monroe Ave., Co- lumbus, O.	Best study.....	5 00
Lillian Coler.....	83 W. Ninth Ave., Co- lumbus, O.	2d best study.....	3 00
Lillian Harmer.....	74 N. Monroe Ave., Co- lumbus, O.	Best exhibit of pastels, four pieces, not otherwise entered.....	20 00

DRAWINGS.

Marian Bright.....	174 Hamilton Ave., Co- lumbus, O.	Best portrait, charcoal.....	\$5 00
Ruth Corbin.....	425 Smead Ave., Clum- bus, O.	2d best portrait, charcoal.....	3 00
Will Rannells.....	Zanesville, O.	Best still life, charcoal.....	5 00
Sybil Emerson.....	1832 Summit St., Colum- bus, O.	2d best still life, charcoal.....	3 00
Louise Zumkeller.....	332 3d Ave., Dayton, Ky.	Best drawing from cast, charcoal.....	5 00
Will Rannells.....	Zanesville, O.	2d best drawing from cast, charcoal.....	3 00
Sybil Emerson.....	1832 Summit St., Colum- bus, O.	Best pen and ink drawing, study.....	5 00
Will Rannells.....	Zanesville, O.	2d best pen and ink drawing, study.....	3 00
Will Rannells.....	Zanesville, O.	Best pen and ink drawing, still life.....	5 00
Elizabeth Davis.....	1543 E. 51st St., Chicago, Ill.	2d best pen and ink drawing, still life.....	3 00

FINE ARTS—Continued

Name of Owner.	Postoffice.	Awards.	Amount.
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DRAWINGS—Concluded.

Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	Best pencil drawing, still life.....	\$5 00
Mrs. L. J. Pulliam.....	1020 S. 7th St., Springfield, Ill.	2d best pencil drawing, still life.....	3 00
Louise Zumkeller.....	322 3d Ave., Dayton, Ky.	Best pencil drawing, study.....	5 00
F. E. Prior.....	594 Oakwood Ave., Columbus, O.	2d best pencil drawing, study.....	3 00
Will Rannella.....	Zanesville, O.	Best pencil drawing from cast.....	5 00
Mrs. L. J. Pulliam.....	1020 S. 7th St., Springfield, Ill.	2d best pencil drawing from cast.....	3 00
Lillian Harmer.....	74 N. Monroe Ave., Columbus, O.	Best display of four drawings in pencil, not otherwise entered.....	10 00
Marian Bright.....	174 Hamilton Ave., Columbus, O.	Best display of four drawings in charcoal, not otherwise entered.....	10 00

BASKETRY—AMATEUR.

Mrs. M. W. Jennings.....	4232 Delaney St., Cincinnati, O.	2d best sweet grass basket.....	\$2 00
Florence Hotchkiss.....	360 W. 2d Ave., Columbus, O.	Best pine needle basket.....	4 00
Nellie Carson.....	70 University Ave., Delaware, O.	2d best pine needle basket.....	2 00
Mrs. Emily H. Mosteller.....	120 Elmwood Ave., Newark, O.	Best raffia basket, large.....	4 00
Grace B. Matson.....	Ashtabula, O.	2d best raffia basket, large.....	2 00
Bertha K. Kraus.....	Columbus, O., State Library	Best raffia basket, small.....	4 00
Carrie F. Mosteller.....	118 Elmwood Ave., Newark, O.	2d best raffia basket, small.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best reed basket, large.....	4 00
Mrs. Emily H. Mosteller.....	120 Elmwood Ave., Newark, O.	2d best reed basket, large.....	2 00
Mrs. Emily H. Mosteller.....	120 Elmwood Ave., Newark, O.	Best reed basket, small.....	4 00
Mrs. W. H. Covault.....	Mechanicsburg, O.	2d best reed basket, small.....	2 00
Mrs. W. A. Kirkpatrick.....	179 Chittenden Ave., Columbus, O.	Best tray.....	4 00
Mrs. G. E. Brittain.....	903 Manhattan Ave., Dayton, O.	2d best tray.....	2 00
Amelia D. Covault.....	Mechanicsburg, O.	Best specimen.....	4 00
Florence Hotchkiss.....	360 W. 2d Ave., Columbus, O.	2d best specimen.....	2 00

WOOD CARVING—AMATEUR.

Mabel Hain.....	1749 N. 4th St., Columbus, O.	Best chair.....	\$4 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best chair.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best chest.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best sconce.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best handkerchief box.....	4 00
Winifred Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best handkerchief box.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best picture frame.....	4 00
Winifred Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best picture frame.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best book rack.....	4 00
Mabel Hain.....	1749 N. 4th St., Columbus, O.	2d best book rack.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best magazine rack.....	4 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best magazine rack.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.	2d best pipe rack.....	2 00

FINE ARTS—Continued.

Name of Owner.	Postoffice.	Awards	Amount.
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WOOD CARVING—AMATEUR—Concluded.

Mabel Hain.....	1749 N. 4th St., Colum- bus, O.....	Best specimen.....	\$4 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.....	2d best specimen.....	2 00
Mrs. W. S. Holten.....	611 N. Wittenberg Ave., Springfield, O.....	Best display, 3 pieces.....	10 00

MODELING.

Mrs. J. M. Bitzer.....	281 17th Ave., Colum- bus, O.....	Best animal.....	\$15 00
Ferol Sibley.....	103 W. Patterson Ave., Columbus, O.....	2d best animal.....	8 00
F. E. Prior.....	594 Oakwood Ave., Co- lumbus, O.....	Best figure.....	15 00
Amel a Ludwig.....	423 S. Champion Ave., Columbus, O.....	2d best figure.....	8 00
Maud Myers.....	Roundhead, O.....	Best portrait bust.....	15 00
R. K. Waters.....	Columbus, O., R. F. D. 5.	2d best portrait bust.....	8 00

MINIATURE.

Amelia Ludwig.....	423 S. Champion Ave., Columbus, O.....	Best specimen.....	\$10 00
Ferol Sibley.....	103 W. Patterson Ave., Columbus, O.....	2d best specimen.....	5 00

ARTS AND CRAFTS—OPEN TO ALL.

Name of Owner.	Postoffice.	Awards.	Amount.
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HAND WROUGHT METAL—SILVER, COPPER OR BRASS.

Eva B. Mosteller.....	Newark, O.....	Best platter.....	\$4 00
Mary Godard.....	1038 Oak St., Columbus, O.....	2d best platter.....	2 00
Carrie F. Mosteller.....	118 Elmwood Ave., New- ark, O.....	Best tray or server.....	4 00
Mary Godard.....	1038 Oak St., Columbus, O.	2d best tray or server.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best spoon.....	4 00
Mrs. C. S. Anderson.....	3 14th Ave., Columbus, O.	2d best spoon.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.....	Best bowl.....	4 00
Elizabeth Davis.....	1543 E 61st St., Chicago, Ill.....	2d best bowl.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best box.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.....	2d best box.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.....	Best pair candlesticks.....	4 00
Mrs. L. C. Covault.....	Mechanicsburg, O.....	2d best pair candlesticks.....	2 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.....	Best pair candle shades.....	4 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Day- ton, O.....	2d best pair candle shades.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Colum- bus, O.....	Best lamp.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.....	Best lamp shade.....	4 00
Elizabeth Davis.....	1543 E. 61st St., Ch ago, Ill.....	2d best lamp shade.....	2 00

FINE ARTS—Continued.

Name of Owner.	Postoffice.	Awards.	Amount.
HAND WROUGHT METAL—SILVER, COPPER OR BRASS—Concluded.			
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	Best desk blotter, letter holder, ink stand....	\$4 00
Carrie F. Mosteller.....	118 Elmwood Ave., Newark, O.	2d best desk blotter, letter holder, ink stand.	2 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	Best specimen.....	4 00
Mrs. Ed. Greiner.....	70 E. Williams St., Delaware, O.	2d best specimen.....	2 00
Eva B. Mosteller.....	Newark, O.	Best specimen of etching.....	4 00
Mrs. W. S. Holton.....	611 N. Wittenberg Ave., Springfield, O.	2d best specimen of etching.....	2 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	2d best sugar and creamer.....	2 00
Eva B. Mosteller.....	Newark, O.	Best sconce.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	2d best sconce.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Columbus, O.	Best nut set.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	2d best nut set.....	2 00

JEWELRY.

Carrie F. Mosteller.....	118 Elmwood Ave., Newark, O.	Best ring.....	\$4 00
Mary Godard.....	1038 Oak St., Columbus, O.	2d best ring.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Columbus, O.	Best bracelet.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	2d best bracelet.....	2 00
T. T. Hotchkiss.....	360 W. 2d Ave., Columbus, O.	Best comb.....	4 00
Mrs. C. S. Anderson.....	3 14th Ave., Columbus, O.	2d best comb.....	2 00
Carrie F. Mosteller.....	118 Elmwood Ave., Newark, O.	Best chain and pendant.....	4 00
R. K. Waters.....	Columbus, O., R. F. D. 5.	2d best chain and pendant.....	2 00
Carrie F. Mosteller.....	118 Elmwood Ave., Newark, O.	Best hat pin.....	4 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	2d best hat pin.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best brooch.....	4 00
Mrs. C. S. Anderson.....	3 14th Ave., Columbus, O.	2d best brooch.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best specimen.....	4 00
Mrs. G. E. Brittain.....	900 Manhattan Ave., Dayton, O.	2d best specimen.....	2 00

TOOLED LEATHER.

Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	Best magazine cover.....	\$4 00
Mrs. E. C. Hull.....	880 E. Broad St., Columbus, O.	2d best magazine cover.....	2 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	Best desk set.....	4 00
Mrs. W. S. Holton.....	611 N. Wittenberg Ave., Springfield, O.	2d best desk set.....	2 00
Winifred Holten.....	611 N. Wittenberg Ave., Springfield, O.	Best table mat.....	4 00
Grace B. Matson.....	Ashtabula, O.	2d best table mat.....	2 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	Best card case.....	4 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	2d best card case.....	2 00
Mary Godard.....	1038 Oak St., Columbus, O.	Best bag.....	4 00
Grace B. Matson.....	Ashtabula, O.	2d best bag.....	2 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	Best purse.....	4 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	2d best purse.....	2 00
Elizabeth Davis.....	1543 E. 61st St., Chicago, Ill.	Best belt.....	4 00
Mrs. A. L. B. Cheney.....	1344 E. 63d St., Chicago, Ill.	2d best belt.....	2 00
Elizabeth Leigh.....	Groveport, O.	Best specimen.....	4 00
Mrs. E. C. Hull.....	880 E. Broad St., Columbus, O.	2d best specimen.....	2 00

FINE ARTS—Concluded.

Name of Owner.	Postoffice.	Awards.	Amount.
DESIGNING.			
Mrs. G. E. Brittain.....	900 Manhattan Ave., Day- ton, O.	Most original book cover.....	\$4 00
Marian Bright.....	174 Hamilton Ave., Co- lumbus, O.	2d most original book cover.....	2 00
Silvio Paini.....	345 Kossuth St., Colum- bus, O.	Best design stained glass Window.....	15 00
Ferol Sibley.....	103 W. Patterson Ave. Columbus, O.	Most original wall paper design.....	4 00
Marian Bright.....	174 Hamilton Ave., Co- lumbus, O.	2d most original wall paper design.....	2 00
Amelia Ludwig.....	423 S. Champion Ave., Columbus, O.	Best collection practical wall paper design (not more than four).....	15 00

EIGHTH DEPARTMENT—MACHINERY AND AGRICULTURAL IMPLEMENTS.

P. G. EWART, Member in Charge.

GUS SEIBERLING Super ntendent.
CARL WILLIAMS Assistant Superintendent.
T. J. PALMER Assistant Superintendent.

Received from sale of space, 1912 \$2,191 00
Paid superintendents, etc., 1912 130 50
Received from sale of space, 1911 \$2,362 20
Paid superintendents, etc., 1911 85 50
Received from sale of space, 1910 \$2,366 10
Paid superintendent, etc., 1910 129 50

MACHINERY AND AGRICULTURAL IMPLEMENTS.

Name of Exhibitor.	Postoffice.	Exhibits.
J. D. Adams Co.....	Columbus, O.....	Gasoline Tractors, Contractor's Engines, Motor Rollers Drags, Culvert Pipe.
Adams Husker Co.....	Marysville, O.....	Huskery.
Akron Cultivator Co.....	Akron, O.....	Cultivators, Platform Cutters, Potato Diggers.
Aultman-Taylor Co.....	Mansfield, O.....	Steam Traction Engines, Separators, Tanks.
American Hog Post Co.....	Peoria, Ill.....	Hog post.
American Seeding Machine Co.....	Springfield, O.....	Drills, Sowers, Corn Planters, Cider Mills, Harrows Cultivators.
American Steel & Wire Co.....	Chicago, Ill.....	Steel Fence Posts.
American Wagon Co.....	Dixon, Ill.....	Wagon Beds.
Appleton Mfg. Co.....	Batavia, Ill.....	Stationary Engines, Corn Huskers, Silo Fillers, Manure Spreaders, Corn Shellers, Grinders.
Armstrong Mfg. Co.....	Waterloo, Iowa.....	Gasoline Engines, Well Drilling Machines.
Ashland Anchor Co.....	Ashland, O.....	Fence Anchors.
Ashland Mfg. Co.....	Ashland, O.....	Anchors and Belt Fasteners.
Associated Mfgs. Co.....	Waterloo, Ia.....	Gasoline Engines, Cream Separators, Power Washing Machines, Concrete Mixers, Spray Pumps, Electric Lighting Outfits.
Auglaize Motor Car Co.....	Auglaize, O.....	Motor Trucks.
Avery Co.....	Indianapolis, Ind.....	Auto Trucks, One-Man Gas Plowing and Threshing Outfit.
A. D. Baker Co.....	Swanton, O.....	Traction Engines, Grain Separators.
Banting Machine Co.....	Toledo, O.....	Ensilage Cutters, Gasoline Tractors, Hay Presses.
H. E. & C. S. Barnes.....	Toledo, O.....	Poultry Feeding Devices.
Bateman Mfg. Co.....	Orrville, O.....	Potato Planters and Diggers, Cultivators, Spraying Machines.
Bauer Bros.....	Springfield, O.....	Gasoline Engines, Power and Sweep Mills.
Belleville Shock Mover Co.....	Belleville, Ill.....	Belleville Shock Mover.
Bennett & Co.....	Westerville, O.....	Corn Harvester, Tile Ditcher, Stump Puller.
F. W. Bird & Son.....	East Walpole, Mass.....	Building and Insulating Papers, Wall Board and Roofing
Birdsell Mfg. Co.....	South Bend, Ind.....	Farm Wagons, Clover Hullers.
Blount Plow Works.....	Evanville, Ind.....	Plows and Potato Diggers.
Bluffton Mfg. Co.....	Bluffton, O.....	Cream Separators, Gasoline Engines, Shafting and Pul- leys, Washing Machines, Trucks, Stock Tanks.
Bond Steel Post Co.....	Adrian, Mich.....	Steel Posts, Farm Fence and Gates.
Henry M. Boston.....	New Berlin, Ill.....	The Good Luck Heater.
Brown Carriage Co.....	Cincinnati, O.....	Storm and End Spring Buggies.
Brown-Manly Plow Co.....	Columbus, O.....	Cultivators, Push Carts, Harrows, Plows, Potato Dig- gers, Hand Rollers, Drags, Lawn Swings, Steel Shapers.
Brown Mfg. Co.....	Zanesville, O.....	Farm Wagons, Plows, Harrows, Cultivators, Potato Diggers, Land Rollers.
Bryan Plow Co.....	Bryan, O.....	Plows, Harrows, Tank Heaters.
Bucher & Gibbs Plow Co.....	Canton, O.....	Rollers, Harrows, Plows, Potato Diggers, Cultivators
A. Buchs Sons Co.....	Elizabethtown, Pa.....	Lawn Swings, Corn Shellers, Wood Saws, Wheel Bar- rows, Straw Cutters, Water Pumps, Steel and Cast Hog and Poultry Troughs.
Buckeye Wire Stretcher Co.....	Columbus, O.....	Wire stretchers.
Candee Incubator & Brooding Co.....	DeWitt, N. Y.....	Incubators.
J. I. Case Plow Works.....	Columbus, O.....	Plows, Harrows, Cultivators, Corn Planters.
Case Threshing Machine Co.....	Columbus, O.....	Traction Engines, Steam and Gas Rollers, Rock Crush- ers, Stone Grading Bin.
Celina Mfg. Co.....	Celina, O.....	Wind Mills, Towers, Tanks, Pumps.

MACHINERY AND AGRICULTURAL IMPLEMENTS—Continued.

Name of Exhibitor.	Postoffice.	Exhibits.
Champion Co-operator Co.	Springfield, O.	Champion Evaporator.
Clark Grave Vault Co.	Columbus, O.	Grave Vaults.
Cleveland Auto School.	Cleveland, O.	Touring Car.
Geo. Collins.	Mt. Vernon, O.	Queen Separators.
Collins Plow Co.	Quincy, Ill.	Plows, Cultivators, Harrows, Hay Presses.
Colvin, Chase & Co.	South Charleston, O.	Steel Fence Posts, Gates, Arches, Lawn Fence.
Columbus Hay Press Co.	Columbus, O.	Hay Presses, Manure Spreaders, Gasoline Engines, Delivery Wagons.
Columbian Mail Crane Co.	Columbus, O.	Victor Sanitary Churn.
Columbia Planter Co.	Springfield, O.	Gang Seeders, Hand Planters, Cultivators.
Cook Motor Co.	Delaware, O.	Gasoline Engines.
The Cyclone Fence Co.	Columbus, O.	Ornamental Fence and Gates.
Dayton Pitless Scale Co.	Dayton, O.	Dayton Pitless Scales.
Detroit Motor Car Supply Co.	Detroit, Mich.	Kerosene Engines.
Domestic Engine & Pump Co.	Shippensburg, Pa.	Electric Light Plant and Storage Battery, Sprayers, Grinders, Pumps.
Drummond Fence Co.	Chillicothe, O.	Farm and Lawn Fence and Gates.
Durant-Dort Carriage Co.	Flint, Mich.	Delivery Wagons, Storm and End Spring Buggies.
Eastern Moline Plow Co.	Moline, Ill.	McDonald Pitless Scales, Sulky Plows, Cultivators, Corn Planters, Farm Wagons, Buggies, Harrows.
Elite Mfg. Co.	Ashland, O.	Concrete Mixers, Jacks.
Emerson Brantingham Co.	Indianapolis, Ind.	Storm and End Spring Buggies, Manure Spreaders, Cultivators, Rakes, Hay Loaders, Mowers, Plows, Corn Planters, Harrows.
Eureka Stone & Ore Crusher Co.	Cedar Rapids, Ia.	Stationary Engines, Feed Grinders, Stone Crushers.
Fairbanks-Morse Co.	Cincinnati, O.	Stock and Wagon Scale, Gasoline Engines, Power Pumps, Wood Saw Frames, Lighting Plant Outfit, Warehouse Scales, Water System.
Farmers' Fertilizer Co.	Columbus, O.	Fertilizer.
Farmers' Handy Wagon Co.	Saginaw, Mich.	Silos and Silo Fillers.
Findlay Carriage Co.	Findlay, O.	Storm Buggies, Phaetons, Surreys, Side and End Spring Wagons, Pony Runabouts and Traps, Waste Paper Boilers.
S. J. Fish & Co.	Jackson, Mich.	Pumps, Wind Mills, Gas and Gasoline Engines, Jacks and Trucks.
Flint & Walling Co.	Columbus, O.	Electric Oil Burning Engines, Steam Pumping Engines.
Foos Gas Engine Co.	Springfield, O.	Cement Steps.
S. Fry.	Westerville, O.	Rollers, Harrows, Corn Planters, Cultivators, Plows, Storm Buggies.
Gale Mfg. Co.	Albion, Mich.	Road Rollers, Stone Crushers, Road Drags, Plows, Scrapers, Graders, etc.
Galion Iron Works.	Galion, O.	Garden City Feeders.
Garden City Feeder Co.	Columbus, O.	Steam Rollers, Combination Rollers, Road Graders, Rock Crushers, Contractor Supplies.
Gehl Bros. Mfg. Co.	West Bend, Wis.	Rotary Engines.
Good Roads Machinery Co.	Pittsburgh, Pa.	Maple Syrup Evaporator.
D. M. Green.	Columbus, O.	Binder Twine and Rope.
Grimm Mfg. Co.	Cleveland, O.	Sulky Plow Seeder Attachment, Automatic Burglar Proof Latch and Lock.
Groendyke Co.	Chicago, Ill.	Ensilage Cutters, Tanks and Silos.
Harden & Farrar.	London, O.	Silos and Fillers.
R. E. Harrison.	Columbus, O.	Sanitary Cow Stalls, Feed and Litter Carriers, Feed Trucks and Horse Barn Equipments.
W. R. Harrison.	Massillon, O.	Step Ladders.
Harris Mfg. Co.	Salem, O.	Spraying Tower.
J. F. Henry Binding Works.	Peoria, Ill.	Gasoline Engines.
F. G. Hayes.	Sharon, Pa.	Gasoline Engines, Wind Mills, Pumps and Pump Jacks, Tanks and Troughs.
Heer Engine Co.	Portsmouth, O.	Potato Digger and Planter.
Heller-Aller Co.	Napoleon, O.	Potato Diggers and Pickers.
Hist Potato Machinery Co.	Alliance, O.	Sprayers, Gasoline Pumping Outfits.
Hoover Mfg. Co.	Avery, O.	Granite.
D. M. Hough & Sons.	Columbus, O.	Cultivators.
W. H. Houtt Monument Co.	Columbus, O.	Road Rollers, Steam and Gasoline Traction Engines, Stockers, Baggers and Weighers, Tanks.
Geo. D. Houston.	Rushville, Ind.	Phaeton, Carriages, Storm Buggies, Pony Traps, Market Wagons, and Farm Wagons.
Huber Mfg. Co.	Marion, O.	Manure Spreaders, Cider Press, Sulkeys, Cream Separators, Harrows, Grain Drill.
E. H. Huffman.	Columbus, O.	Farm Gates and Wire Splicers.
C. H. & J. F. Hunt.	Columbus, O.	

MACHINERY AND AGRICULTURAL IMPLEMENTS—Continued.

Name of Exhibitor.	Postoffice.	Exhibits.
Hunt-Helm-Ferris Co.....	Harvard, Ill.....	Litter, Feed and Hay Carriers, Door Hangers, Tank Heaters, Stalls and Stanchions.
H. L. Hurst Mfg. Co.....	Canton, O.....	Potato and Orchard Sprayers.
Hygeno Disinfectant Co.....	Cleveland, O.....	Stock Dips.
Indiana Silo Co.....	Anderson, Ind.....	Silos, Manure and Feed Carriers, Cow Stanchions.
International Harvester Co.....	Columbus, O.....	Shredders, Hay Presses, Delivery Wagons, Corn Shellers, Binders, Traction Engines, Manure Spreaders, Drills and Sowers.
Interurban Electric & Machine Co.....	Columbus, O.....	Gasoline Engines and Accessories.
Iowa Gate Co.....	Cedar Falls, Ia.....	Iowa Farm Gate.
Iron Crib & Bin Co.....	Wooster, O.....	Iron Corn Crib.
Jackson Fence Co.....	Jackson, Mich.....	Farm Fence.
Jamesville Machine Co.....	Jamesville, Wis.....	Corn Planters, Harrows, Plows, Cultivators.
Jeschke Mfg. Co.....	Bellevue, O.....	Ditchers, Corn Cutters, Ditching Plows.
Jewell Carriage Co.....	Cincinnati, O.....	Endspring Buggies, Phaetons, Pony Runabouts, Delivery Wagons.
C. B. Johnson.....	Columbus, O.....	Postless Fence Coupler.
F. G. Johnson.....	Columbus, O.....	Gasoline Engines.
Kenney Machinery Co.....	Indianapolis, Ind.....	Gasoline Engines, Hay Presses.
Kalamazoo Tank & Silo Co.....	Kalamazoo, Mich.....	Cutters, Wood Silos.
Lansing Wagon Works.....	Lansing, Mich.....	Farm Wagons.
F. X. Lanterbur & Co.....	Sidney, O.....	Traction Gasoline Engines.
Long-Alstatter Co.....	Hamilton, O.....	Cultivators, Harrows, Plows, Rakes.
Louisville Brick & Tile Co.....	Louisville, O.....	Silos.
Manson-Campbell Co.....	Detroit, Mich.....	Chatham Mills.
Maytay Co.....	Indianapolis, Ind.....	Huskers and Shredders, Clover Hullers, Washing Machines.
Meadows Mfg. Co.....	Pontiac, Ill.....	Pitless Scales, Power Washing Machines, Portable Wagon Dump and Grain Elevators.
Mendenhall Bros.....	Waverly, O.....	Automatic Pivot Gate.
Metal Flanged Concrete Pipe Co.....	Mt. Gilead, O.....	Culvert and Sewer Pipe.
C. G. Mi burn.....	Dayton, O.....	Concrete Mixer, Brick Machine, Gasoline Engines-Scales.
Miles Mfg. Co.....	Jackson, Mich.....	Concrete Mixers and Block Machines.
Miller Anchor Co.....	Norwalk, O.....	Feeder and Exerciser, Egg Crates.
Mott Implement Co.....	Columbus, O.....	Corn Cutters, Shockers and Loaders.
National Fire Proofing Co.....	Columbus, O.....	Waco Tile.
Fred M. Neely.....	Lima, O.....	Crude Oil Engines.
New Idea Seed Cleaner Co.....	Shilo, O.....	Seed Cleaners.
Norfolk Southern R. R. Co.....	Norfolk, Va.....	Farm Products and Fruits from Eastern Carolina and Virginia.
Ohio Concrete Sewer Co.....	Chillicothe, O.....	Concrete Sewer Pipes.
Ohio Cultivator Co.....	Bellevue, O.....	Hay Presses, Land Rollers, Harrows, Cultivators
Ohio Portable Coupler Co.....	Columbus, O.....	Pulverizers, Flexible Roller, Shovel Plows.
Ohio Post Mold Co.....	Toledo, O.....	Portable Chicken House.
Ohio Rake Co.....	Dayton, O.....	Concrete Post Moulds.
Ohio Road Machine Co.....	Oberlin, O.....	Hay Loaders, Rakes, Cultivators, Corn Planters, Drill
Ohnsman, A. C.....	Columbus, O., Sta. A. R. 2.....	Potato Diggers, Corn Harvesters, Harrows.
Oliver Chilled Plow Works.....	South Bend, Ind.....	Reversible Road Machines, Surface Levelers.
Page Woven Wire Fence Co.....	Adrian, Mich.....	Garden Line Guide.
Parker Davis Co.....	Detroit, Mich.....	Walking, Gang and Sulky Plows, Cultivators.
Parline & Orendorf.....	Canton, Ill.....	Fence and Gates.
Perfect Silo & Cistern Co.....	Delaware, O.....	Plows, Sulkeys, Cultivators, Corn Planters, Harrows
Phillips Cement Stone Co.....	Columbus, Co.....	Cement Silos.
Phillips, L. L.....	Cameron, W. Va.....	Cement Stone House
Pittsburg Steel Co.....	Pittsburg, Pa.....	Hog Traps.
Port Huron Engine & Thresher Co.....	Port Huron, Mich.....	Fencing.
Red King Co.....	Sidney, O.....	Gasoline Tractor with Plowing System.
Reeves & Co.....	Columbus, O.....	Wind Mills, Heaters, Tanks.
Richmond Motor Car Co.....	Columbus, O.....	Separators, Clover Hullers, Hay Presses, Gasoline Engines, Traction Engines, Tanks and Plows.
Riggle Wagon Co.....	Columbus, O.....	Milk, Storm, Grocery and Express Wagons, Trucks and Farmers' Surreys.
Rosenthal Corn Husker Co.....	Milwaukee, Wis.....	Corn Huskers.
E. W. Ross & Co.....	Springfield O.....	Silos and Cutters.

MACHINERY AND AGRICULTURAL IMPLEMENTS—Concluded.

Name of Exhibitor.	Postoffice.	Exhibits.
Rowe Mfg. Co.....	Galesburg, Ill.....	Manure Spreaders.
Rude Bros. Mfg. Co.....	Liberty, Ind.....	Hay Balers, Portable and Stationary Oil Engines, Oil
Rumely Products Co.....	La Porte, Ind.....	Tractors, Gasoline Tractors, Huskers and Shredders
		Clover Hullers.
Russell & Co.....	Masvillion, O.....	Steam Traction Engines, Separators.
D. M. Sechler Co.....	Cincinnati, O.....	Manure Spreaders, Corn Planters.
Simpson Cement Mould		
Co.....	Columbus, O.....	Cement Building Block, Ornamental Concrete Stone,
W. H. Snyder		Lawn Vases, Etc.
E. H. Snyder.....	Barberton, O.....	Black Diamond Corn Planters.
South Bend Chilled Plow		
Co.....	South Bend, Ind.....	Plows, Cultivators, Potato Diggers.
Spaulding Tilling Ma-		
chine Co.....	Cleveland, O.....	Harrows, Tilling Machines.
Sprout-Waldron Co.....	Muncy, Pa.....	Attrition Mill, Burr Mill, Corn Sheller.
Standard Separator Co.....	Milwaukee, Wis.....	Automatic Cream Separators.
Star Mfg. Co.....	New Lexington, O.....	Separators, Gasoline Engines, Feed Grinders.
Sterling Mfg. Co.....	Sterling, Ky.....	Rakes, Hay Loaders, Pulverizers, Plows, Harrows, Feed
		Mill Grinders, Stock Cutters, Fertilizer Sowers.
Street Gate Co.....	Wagoner, Ill.....	Steel Gates.
Thomas & Armstrong Co.	London, O.....	Gasoline Engines, Barn Ventilators, Mowing Machines
		Drills, Hay Loaders, Rakes.
Thomas Mfg. Co.....	Springfield, O.....	Harrows, Corn Drills.
United Engine Co.....	Lansing, Mich.....	Diabolo Separators, United Power Washing Machines.
Van Dusen & Roys Co.....	Columbus, O.....	Gasoline Engines.
Van Pelt, Milner.....	Highland, O.....	Wagon Beds.
Virginia-Carolina Chem-		
ical Co.....	Cincinnati, O.....	Harrows, Tilling Machines.
J. H. Voss & Son.....	Atlanta, O.....	Farm and Lawn Fence and Gates.
Ward Fence Co.....	Decatur, Ind.....	
Waterloo Cement Ma-		
chine Co.....	Waterloo, Ia.....	Concrete Mixers, Culvert Mould.
C. L. Wert.....	Kendallville, Ind.....	Perfect Brick Machines.
Owen, West.....	Lynchburg, O.....	Tile Ditch Machine.
Whitman Agricultural Co.	St. Louis, Mo.....	Hay Press.
Wills Mfg. Co.....	Mendota, Ill.....	Tank Heaters.
Williams Contractors'		
Supply Co.....	Columbus, O.....	Traction Engines, Crushing Plants, Graders, Sweepers
		Sprinklers, etc., Concrete Mixers, Wheel Barrows.
Walter A. Wood Co.....	Columbus, O.....	Binders, Manure Spreaders, Rakes, Harrows, Drills
		Gasoline Engines, Grinders, Farm and Dump Wagons
Wood & Spencer Co.....	Cleveland, O.....	Electric Lighting and Power Plant Outfit.
A. L. Yardley.....	Columbus, O.....	Weather Strips, Door and Window Screens.
Youngstown Sheet &		
Tube Co.....	Youngstown, O.....	Farm Fence.

NINTH DEPARTMENT—MECHANICS' AND MANUFACTURERS' PRODUCTS.

C. H. GANSON, Member in Charge.

E. K. HORNES	Superintendent.
Received from sale of space, 1912	\$2,070 70
Paid superintendent, etc., 1912	36 00
Received from sale of space, 1911	\$2,141 40
Paid superintendent, etc., 1911	40 50
Received from sale of space, 1910	\$878 05
Paid superintendent, labor, etc., 1910	52 95

MANUFACTURAL AND VEHICLE BUILDINGS.

Name.	Postoffice.	Exhibits.
Ahlbrand Carriage Co.	Seymour, Ind.	Carriages.
American Agricultural Chemical Co.	Cleveland, O.	Fertilizer.
Anchor Buggy Co.	Cincinnati, O.	Carriages.
Armour Fertilizer Works.	Chicago, Ill.	Fertilizer.
Butler Furnace Co.	Butler, O.	Furnaces.
Central Ohio Paper Co.	Columbus, O.	Beaver, Board and Paper.
Colonial Carriage Co.	Circleville, O.	Carriages.
Compton & Price Piano Co.	Columbus, O.	Musical Instruments.
Cook Carriage Co.	Bloomville, O.	Carriages.
Crow Motor Car Co.	Elkhart, Ind.	Automobiles.
Cummins Auto Sales Co.	Columbus, O.	Automobiles.
Diamond Metal Stamping Co.	Columbus, O.	Metal Weather Strips.
Dodge & Zuill.	Syracuse, N. Y.	Washing Machine.
Geo. B. Donavin Co.	Columbus, O.	Uniforms.
Dupont Powder Co.	Pittsburgh, Pa.	Powder Shells.
Ebinger Sanitary Mfg. Co.	Columbus, O.	Plumbing Supplies.
Enterprise Carriage Mfg. Co.	Miamisburg, O.	Carriages.
E. B. Gaumer & Sons.	Urbana, O.	Pony Vehicles.
German Kali Works.	New York City, N. Y.	Fertilizer.
M. Hamm Co.	Washington, C. H., O.	Fertilizer.
T. T. Haydock Carriage Co.	Cincinnati, O.	Carriages.
D. B. Hoyt.	Columbus, O.	Vacuum Cleaners.
Hydro Carbon Co.	Toledo, O.	
Ideal Heating Co.	Columbus, O.	Furnaces, Ventilators.
Independent Packers' Fertilizer Co.	Columbus, O.	Fertilizer.
James & Myers Buggy Co.	Lawrenceburg, Ind.	Carriages.
Lamneck Co.	Columbus, O.	Furnaces.
J. Leukart Mfg. Co.	Columbus, O.	Mortising Machine.
Mier Carriage Co.	Ligonier, Ind.	Carriage.
Murman Auto Taxi Co.	Columbus, O.	Taxi Cabs and Motor Trucks.
New Columbia Carriage Co.	Columbus, O.	Carriage.
New Process Fertilizer Co.	Columbus, O.	Fertilizer.
Ohio Carriage Mfg. Co.	Columbus, O.	Carriages.
Ohio Corrugated Culvert Co.	Columbus, O.	Culverts.
W. A. Patterson & Co.	Flint, Mich.	Carriages.
Pausch Selbach Wagon & Auto Co.	Columbus, O.	Automobiles.
Peabody Buggy Co.	Postoria, O.	Carriages.
Peters Buggy Co.	Columbus, O.	Carriages.
Poste Bros. Buggy Co.	Columbus, O.	Carriages.
O. G. Roberts & Co.	Columbus, O.	Automobiles.
Ross Carriage Co.	Union City, Ind.	Carriages.
John M. Shilling.	Union City, Ind.	Furnaces.
J. H. & T. A. Sells.	Union City, Ind.	Harness, Saddles, Robes, Trimmings, etc.
D. W. Short.	Union City, Ind.	Automobile.
Smith Agricultural Chemical Co.	Columbus, O.	Fertilizer.
State Highway Department.	Columbus, O.	Good Roads Exhibit.
Union City Carriage Co.	Union City, Ind.	Carriages.
Universal Portland Cement Co.	Chicago, Ill.	Cement Products.
Victor Mfg. Co.	Columbus, O.	Washing Machines.
Warren Motor Sales Co.	Columbus, O.	Automobiles.
H. F. Watson & Co.	Erie, Pa.	Asbestos Roofing and Water Pipe Protection.
Wing Seed Co.	Mechanicsburg, O.	Seeds.

TENTH DEPARTMENT—MERCHANDISE, MUSIC, ETC.

C. H. GANSON, Member in Charge.

GEO. W. COUCHMAN Superintendent.

Received from sale of space, 1912.....	\$510 40
Paid superintendent, 1912.....	36 00
Received from sale of space, 1911.....	\$519 20
Paid superintendent, 1911.....	36 00
Received from sale of space, 1910.....	\$194 40
Paid superintendent, janitor, labor, etc., 1910.....	50 50

MERCHANDISE, MUSIC, ETC.

Name.	Postoffice.	Exhibits.
Central Ohio Equipment Co.....	Columbus, O.....	Hardware & Stoves.
Cussins & Pearn.....	Columbus, O.....	Washing Machines.
N. J. Dunkel.....	Columbus, O.....	Steel Ranges, Stoves and Ranges.
Engman Matthews Range Co.....	Columbus, O.....	Guides and Maps of Columbus.
Franklin Land Co.....	Columbus, O.....	Furniture and Stoves.
F. G. & A. Howald.....	Columbus, O.....	Cooking and Heating Stoves.
Kalamazoo Stove Co.....	Kalamazoo, Mich.....	Lighting System.
Krein Mfg. Co.....	Wapakoneta, O.....	Display of Company's Various Premiums.
Larkin Co.....	Buffalo, N. Y.....	Desks.
Monarch Desk Co.....	Columbus, O.....	Cash Registers.
National Cash Register Co.....	Dayton, O.....	Washing Machines.
One Minute Washer Co.....	Sandusky, O.....	Stoves and Ranges.
Peerless Stove & Range Co.....	Columbus, O.....	Stoves, Ranges and Heaters.
Quad Stove Co.....	Columbus, O.....	Watches and Jewelry.
South Bend Watch Co.....	South Bend, Ind.....	Vacuum Cleaners.
M. L. Stevenson.....	Columbus, O.....	Paints, Varnishes, etc.
Warren Paint Co.....	Columbus, O.....	Washing Machines.
White Lily Mfg. Co.....	Davenport, Ia.....	

INDEX TO EXHIBITORS.

HORSES.

AMERICAN BRED DRAFT.

Name.	Postoffice.
Butler, C. A.....	Plain City, Ohio.
Coyner, C. C.....	Delaware, Ohio.
Dix, C. D. F.....	Delaware, Ohio.
Ferguson, W. W.....	Delaware, Ohio.
Garlinghouse, W. E. and Son.....	Galena, Ohio.
Gordon, Tom.....	Mt. Gilead, Ohio.
Greasaman, Frank.....	Delaware, Ohio.
Hoewischer, Wm. & Son.....	Sidney, Ohio.
Humes, C. W.....	Delaware, Ohio.
Jones, C. M.....	Plain City, Ohio.
Long, G. C.....	Cardington, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
McLain, Lonzo.....	Lima, Ohio.
Murray and Wilson.....	London, Ohio.
Ross, Wm. B.....	Galena, Ohio.
Stanton, Wm.....	Ashley, Ohio.
Warner, M. H.....	Quaker City, Ohio.
White Star Farm.....	Sunbury, Ohio.

AMERICAN BRED CARRIAGE HORSE.

Beyerly, Miss Anra.....	Station B, Columbus, Ohio.
Brimbee, Wm.....	Marengo, Ohio.
Brown, Frank G.....	Cardington, Ohio.
Cunnard, L. S.....	Fulton, Ohio.
Dent, I. I.....	884 Miller Ave., Columbus, Ohio.
Hilligas Bros.....	Cadiz, Ohio.
Kennedy, Harold.....	Marysville, Ohio.
McCurdy, W. C.....	Ashley, Ohio.
Maly, Mrs. Geo.....	137 Sherman Ave., Columbus, Ohio.
Mitchell Sales Stable.....	Columbus, Ohio.
Parsell, B. F.....	Reynoldsburg, Ohio.
Price, J. W.....	Plain City, Ohio.
Robinson, W. S.....	Mt. Sterling, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
Smith, C. G.....	Reynoldsburg, Ohio.
Smith, Seymour.....	Pataskala, Ohio.
Sprague, D. A.....	South Charleston, Ohio.
White Star Farm.....	Sunbury, Ohio.

BELGIAN.

Bell Bros.....	Wooster, Ohio.
Crawford, Geo. W.....	Newark, Ohio.
Hoewischer, Wm. and Son.....	Sidney, Ohio.
Murray and Wilson.....	London, Ohio.
Robinson, B. L.....	Unionville Center, Ohio.

CLYDESDALES AND SHIRES.

Galloway, David M.....	Culpepper, Va..
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HORSES—Continued.**COACHING PARADE.**

Name.	Postoffice.
Beyerly, Miss Anna.....	Sta. B. Columbus, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stables.....	Columbus, Ohio.

FRENCH COACH.

McCurdy, W. G.....	Ashley, Ohio.
McLaughlin Bros.....	Columbus, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

GERMAN COACH.

Crawford, Geo. W.....	Newark, Ohio.
Hoewischer, Wm. and Son.....	Sidney, Ohio.
McGonigle, R. D. and Sons.....	Ashley, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

GRADE DRAFT.

Humes, C. W.....	Delaware, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
Stanton, Wm.....	Ashley, Ohio.
Warline, J. R.....	R. 7, Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

HACKNEYS.

Lupton, A. G.....	Hartford City, Ind.
McCurdy, W. G.....	Ashley, Ohio.

HARNESS CLASS.

Beyerly, Miss Anna.....	Sta. B. Columbus, Ohio.
Brooks, John.....	New Holland, Ohio.
Brown, Frank G.....	Cardington, Ohio.
Donovin, H. E.....	Summit St., Clumbus, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stable.....	Columbus, Ohio.
Ritter, W. M.....	Columbus, Ohio.
Smith, C. G.....	Reynoldsburg, Ohio.
Smith, Seymour.....	Pataskala, Ohio.

PERCHERONS.

Bell Bros.....	Wooster, Ohio.
Camp, C. F.....	Homerville, Ohio.
Chambers, O. C.....	Galena, Ohio.
Crawford, Geo. W.....	Newark, Ohio.
Dix, C. D. F.....	Delaware, Ohio.
Ferguson, W. W.....	Delaware, Ohio.
Garlinghouse, W. E. and Son.....	Galena, Ohio.
Hoewischer, Wm. and Son.....	Sidney, Ohio.
Hysell, W. H.....	Leonardsburg, Ohio.
Long, G. C.....	Cardington, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
McGonigle, R. D. and Sons.....	Ashley, Ohio.
MaLain, Lonzo.....	Lima, Ohio.
McLaughlin Bros.....	Columbus, Ohio.
Pollock, E. H.....	Mt. Gilead, Ohio.
Pollock, O. H.....	Delaware, Ohio.

HORSES—PERCHERONS—Concluded.

Name.	Postoffice.
Priest, Wm. and Son.....	Polk, Ohio.
Robinson, B. L.....	Unionville Center, Ohio.
Shultz, Daniel.....	Leonardsburg, Ohio.
Waldrop, Geo. G.....	Edgerton, Ind.
Warner, M. H.....	Quaker City, Ohio.
White Star Farm.....	Sunbury, Ohio.

ROADSTERS—NON-STANDARD.

Beyerly, Miss Anna.....	Sta. B, Columbus, Ohio.
Brooks, John.....	New Holland, Ohio.
Brown, Frank G.....	Cardington, Ohio.
Cunnard, L. S.....	Fulton, Ohio.
Dent, I. L.....	884 Miller Ave., Columbus, Ohio.
Grimes, H. S.....	Portsmouth, Ohio.
Hilligas Bros.....	Cadiz, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
McCurdy, W. G.....	Ashley, Ohio.
Mitchell Sales Stable.....	Columbus, Ohio.
Parkinson, Homer.....	Reynoldsburg, Ohio.
Parsell, B. F.....	Reynoldsburg, Ohio.
Price, J. W.....	Plain City, Ohio.
Robinson, B. L.....	Unionville Center, Ohio.
Robinson, W. S.....	Mt. Sterling, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
Sales, Ben.....	Ashley, Ohio.
Smith, C. G. (Agt.).....	Reynoldsburg, Ohio.
Sprague, D. A.....	South Charleston, Ohio.
White Star Farm.....	Sunbury, Ohio.

ROADSTERS—STANDARD BRED.

Barber, W. A.....	Springfield, Ohio.
Beyerly, Miss Anna.....	Sta. B, Columbus, Ohio.
Brimbee, Wm.....	Marengo, Ohio.
Cunnard, L. S.....	Fulton, Ohio.
Luellan, J. C.....	Ashley, Ohio.
McCurdy, W. G.....	Ashley, Ohio.
Malay, Mrs. Geo.....	137 Sherman Ave., Columbus, Ohio.
Price, J. W.....	Plain City, Ohio.
Smith, C. G. (Agt.).....	Reynoldsburg, Ohio.
Smith, Seymour.....	Pataskala, Ohio.
Sprague, D. A.....	South Charleston, Ohio.

SADDLE HORSES.

Donovin, H. E.....	Summit St., Columbus, Ohio.
Kennedy, Harold.....	Marysville, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stable.....	Columbus, Ohio.
Price, J. W.....	Plain City, Ohio.
Ritter, W. M.....	Columbus, Ohio.
Robinson, W. S.....	Mt. Sterling, Ohio.
Tallmadge, Frank.....	Columbus, Ohio.
White Star Farm.....	Sunbury, Ohio.

HORSES—Continued.**COACHING PARADE.**

Name.	Postoffice.
Beyerly, Miss Anna.....	Sta. B. Columbus, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stables.....	Columbus, Ohio.

FRENCH COACH.

McCurdy, W. G.....	Ashley, Ohio.
McLaughlin Bros.....	Columbus, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

GERMAN COACH.

Crawford, Geo. W.....	Newark, Ohio.
Hoewischer, Wm. and Son.....	Sidney, Ohio.
McGonigle, R. D. and Sons.....	Ashley, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

GRADE DRAFT.

Humes, C. W.....	Delaware, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
Stanton, Wm.....	Ashley, Ohio.
Warline, J. R.....	R. 7, Delaware, Ohio.
White Star Farm.....	Sunbury, Ohio.

HACKNEYS.

Lupton, A. G.....	Hartford City, Ind.
McCurdy, W. G.....	Ashley, Ohio.

HARNESS CLASS.

Beyerly, Miss Anna.....	Sta. B. Columbus, Ohio.
Brooks, John.....	New Holland, Ohio.
Brown, Frank G.....	Cardington, Ohio.
Donovin, H. E.....	Summit St., Columbus, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stable.....	Columbus, Ohio.
Ritter, W. M.....	Columbus, Ohio.
Smith, C. G.....	Reynoldsburg, Ohio.
Smith, Seymour.....	Pataskala, Ohio.

PERCHERONS.

Bell Bros.....	Wooster, Ohio.
Camp, C. F.....	Homerville, Ohio.
Chambers, O. C.....	Galena, Ohio.
Crawford, Geo. W.....	Newark, Ohio.
Dix, C. D. F.....	Delaware, Ohio.
Ferguson, W. W.....	Delaware, Ohio.
Garlinghouse, W. E. and Son.....	Galena, Ohio.
Hoewischer, Wm. and Son.....	Sidney, Ohio.
Hysell, W. H.....	Leonardsburg, Ohio.
Long, G. C.....	Cardington, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
McGonigle, R. D. and Sons.....	Ashley, Ohio.
MaLain, Lonzo.....	Lima, Ohio.
McLaughlin Bros.....	Columbus, Ohio.
Pollock, E. H.....	Mt. Gilead, Ohio.
Pollock, O. H.....	Delaware, Ohio.

HORSES—PERCHERONS—Concluded.

Name.	Postoffice.
Priest, Wm. and Son.....	Polk, Ohio.
Robinson, B. L.....	Unionville Center, Ohio.
Shultz, Daniel.....	Leonardsburg, Ohio.
Waldrop, Geo. G.....	Edgerton, Ind.
Warner, M. H.....	Quaker City, Ohio.
White Star Farm.....	Sunbury, Ohio.

ROADSTERS—NON-STANDARD.

Beyerly, Miss Anna.....	Sta. B, Columbus, Ohio.
Brooks, John.....	New Holland, Ohio.
Brown, Frank G.....	Cardington, Ohio.
Cunnard, L. S.....	Fulton, Ohio.
Dent, I. L.....	884 Miller Ave., Columbus, Ohio.
Grimes, H. S.....	Portsmouth, Ohio.
Hilligas Bros.....	Cadiz, Ohio.
Lyons and Ferguson.....	Delaware, Ohio.
McCurdy, W. G.....	Ashley, Ohio.
Mitchell Sales Stable.....	Columbus, Ohio.
Parkinson, Homer.....	Reynoldsburg, Ohio.
Parsell, B. F.....	Reynoldsburg, Ohio.
Price, J. W.....	Plain City, Ohio.
Robinson, B. L.....	Unionville Center, Ohio.
Robinson, W. S.....	Mt. Sterling, Ohio.
Roloson, Elmer.....	Delaware, Ohio.
Sales, Ben.....	Ashley, Ohio.
Smith, C. G. (Agt.).....	Reynoldsburg, Ohio.
Sprague, D. A.....	South Charleston, Ohio.
White Star Farm.....	Sunbury, Ohio.

ROADSTERS—STANDARD BRED.

Barber, W. A.....	Springfield, Ohio.
Beyerly, Miss Anna.....	Sta. B, Columbus, Ohio.
Brimbee, Wm.....	Marengo, Ohio.
Cunnard, L. S.....	Fulton, Ohio.
Luellan, J. C.....	Ashley, Ohio.
McCurdy, W. G.....	Ashley, Ohio.
Malay, Mrs. Geo.....	137 Sherman Ave., Columbus, Ohio.
Price, J. W.....	Plain City, Ohio.
Smith, C. G. (Agt.).....	Reynoldsburg, Ohio.
Smith, Seymour.....	Pataskala, Ohio.
Sprague, D. A.....	South Charleston, Ohio.

SADDLE HORSES.

Donovin, H. E.....	Summit St., Columbus, Ohio.
Kennedy, Harold.....	Marysville, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Mitchell Sales Stable.....	Columbus, Ohio.
Price, J. W.....	Plain City, Ohio.
Ritter, W. M.....	Columbus, Ohio.
Robinson, W. S.....	Mt. Sterling, Ohio.
Tallmadge, Frank.....	Columbus, Ohio.
White Star Farm.....	Sunbury, Ohio.

PONIES.

OTHER THAN SHETLAND.

Name.	Postoffice.
Humes, C. W.....	Delaware, Ohio.
Hunter, C. C.....	Mt. Vernon, Ohio.
Kahler and Justice.....	Plain City, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Simpson, T. S. and Sons.....	Aurora, Ill.
Smith Bros.....	Mt. Vernon, Ohio.
Smith, Seymour.....	Pataskala, Ohio.
Taylor, Marold.....	Marengo, Ohio.
Warline, J. R.....	R. 7, Delaware, Ohio.

SHETLAND.

Hunter, C. C.....	Mt. Vernon, Ohio.
Kahler and Justice.....	Plain City, Ohio.
Lupton, A. G.....	Hartford City, Ind.
Simpson, T. S. and Sons.....	Aurora, Ill.
Slagle, B. H.....	Kenton, Ohio.
Smith Bros.....	Mt. Vernon, Ohio.
Smith, J. B.....	Shepard, Ohio.
Smith, Seymour.....	Pataskala, Ohio.

CATTLE.

ABERDEEN ANGUS.

Bradfute, D. and Son.....	R. 5, Xenia, Ohio.
Ferguson, Walter.....	Xenia, Ohio.
Tolan, J. Garrett.....	Farmingdale, Ill.
Turnbull, F. B.....	Cedarville, Ohio.

AYERSHIRE.

McCormick, W. L.....	Pataskala, Ohio.
Converse, J. F. & Co.....	Woodville, N. Y.
Schauck, W. P.....	Avon, N. Y.
Seitz, Adam.....	Waukesha, Wis.
Stalter, J. A.....	Pataskala, Ohio.

BROWN SWISS.

Hull Bros.....	Painesville, Ohio.
Wampler, A. F.....	R. 1, Dayton, Ohio.

DEVONS.

Wheeler Homestead, The.....	Kanona, N. Y.
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FAT CATTLE.

Bradfute, D.....	Xenia, Ohio.
Carpenter & Ross.....	Mansfield, Ohio.
Frants, Jas. & Sons.....	Bluffton, Ohio.
Huffman, Wm.....	Washington C. H., Ohio.
Miller, J. H.....	Peru, Ind.

GALLOWAYS.

Frantz, James & Sons.....	Bluffton, Ohio
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CATTLE—Concluded.

GUERNSEYS.

Name.	Postoffice.
Baker, Elbert H.....	Gates Mill, Ohio.
Bell W. Henry & Son.....	Scotts Station Ky.
Chestnut Hill Farm.....	Coalburg, Ohio.
Dean Valley Stock Farm.....	Linden Heights, Ohio.
Gates, R. D.....	Chardon, Ohio.
Hertel, Samuel.....	R. 7 Van Wert, Ohio.
Paxton, Geo. G.....	Houston, Pa.
Phelps, W. D.....	88 Linwood Ave., Columbus, Ohio.
Smith, A. W.....	Pataskala, Ohio.
Smith, Mark E.....	Shepard, Ohio.
Wiscinda Stock and Dairy Farm.....	Acton, Ind.

HEREFORDS.

Luce & Moxley.....	Shelbyville, Ky.
Maxwell, F. E.....	Delaware, Ohio.

HOLSTEINS.

Behmer, Milton M.....	R. D., Marion, Ohio.
Burnside, John T.....	Canonsburg, Pa.
Burris, L. C.....	Shepard, Ohio.
Derier Bros.....	Camp Chase, Ohio.
Dixon, W. S.....	Brandon, Wis.
Paxton, J. G. & Son.....	Houston, Pa.
Warren, Samuel.....	North Berlin, Ohio.

JERSEYS.

Boyd, John F.....	Rushville, Ind.
Dixon, W. S.....	Brandon, Wis.
Harman Stock Farm, The.....	Columbus, Ohio.
Kelly, H. S.....	R. 4 Mt. Gilead, Ohio.
Lane, Frank.....	Columbus, Ohio.
Sheffield Farm.....	Glendale, Ohio.
Souders, W. S.....	Rogers, Ohio.

POLLED DURHAMS.

Miller, J. H.....	Peru, Ind.
Rose, W. W. & Son.....	Rossville, Ind.
Tossey, Wm. & Sons.....	Marysville, Ohio.

RED POLLS.

Hartline, Frank & Sons.....	Strasburg, Ohio.
Ineisher, Geo. & Sons.....	Geneva, Ind.

SHORTHORNS.

Branson, C. A.....	Cadiz, Ohio.
Carpenter & Carpenter.....	Baraboo, Wis.
Carpente. & Ross.....	Mansfield, Ohio.
Hanna, D. R.....	Ravenna, Ohio.
Johnson, R. T.....	Flushing, Ohio.
May & Otis.....	Willoughby, Ohio.
Miller, J. H.....	Peru, Ind.
Rosenberger, W. C.....	Tiffin, Ohio.
Wagner, N. W.....	Fremont, Ohio.
Wilson & Morrison.....	Delaware, Ohio.

SWINE.

BERKSHIRES.

Name.	Postoffice.
Baker, S. T.	Cedarville, Ohio.
Elmendorf Farms.	Lexington, Ky.
Everson Bros.	Wellington, Ohio.
Fawcett, W. G. & Son.	Chesterhill, Ohio.
Humes, N. Y. C.	Huntsville, Ala.
Kite, F. E.	St. Paris, Ohio.
Krantz, J. & Sons.	Canal Dover, Ohio.
Leitner, A. L.	Attica, Ohio.
Raberding, Benj. O.	St. Matys, Ohio.
Sheffield Farm.	Glendale, Ohio.
Townsend Farms.	New London, Ohio.

CHESTER WHITES.

Adams Bros.	Litchfield, Mich.
Colville Bros.	St. Louisville, Ohio.
Fawcett, W. G. & Son.	Chesterhill, Ohio.
Fielder, A. C.	DeGraff, Ohio.
Hardin, F. P. & J. J.	Lima, Ohio.
Wade, F. J.	Weston, Ohio.
Wenger, Chas.	Clayton, Ohio.

DUROC JERSEYS.

Baker, W. P.	Wilmington, Ohio.
Bell, Jas. H.	Grove City, Ohio.
Creamer, T. A.	London, Ohio.
Dreisbach, D. H.	Kingston, Ohio.
Dunlap, Renick W.	Kingston, Ohio.
East Bros.	Lima, Ohio.
Farrington, W. L.	Millford Center, Ohio.
Fawcett, W. G. & Son.	Chesterhill, Ohio.
Field, E. & Son Co.	Camden, Ohio.
Fuson, O. F.	DeGraff, Ohio.
Gerlaugh, Howard	Osborn, Ohio.
Lane, Frank	Columbus, Ohio.
Lavelly, H. E.	Galloway, Ohio.
McDonell, O. P.	Plain City, Ohio.
McKee Bros.	Versailles, Ky.
McKinley, D. O.	Mt. Sterling, Ohio.
McLaughlin, C. J. & Co.	Pleasantville, Ohio.
Mahan Bros.	Osborn, Ohio.
Marin & Curtis.	Fletcher, Ohio.
Mount Wilson.	Mt. Orab, Ohio.
Parshall, B. E.	Hillsboro, Ohio.
Stemen, E. C. & Son.	Middlepoint, Ohio.
Stephens, Wm.	Ashley, Ohio.
Stuckey, Chas. J. & Son.	Mechanicsburg, Ohio.
Whittier, W. P.	Galena, Ohio.

HAMPSHIRE.

Alt, Adam	Rockford, Ohio.
Castor, Dan W.	Bellville, Ohio.
Essig, Sylvester	Tipton, Ind.
Field, E. & Son Co.	Camden, Ohio.
Harris & Deldine	Richwood, Ohio.
Rice, C. S.	Spencer, Ohio.

SWINE—Concluded.

MULE FOOT.

Name.	Postoffice.
Custard Bros.	Pleasantville, Ohio.
Dunlap, John H.	Williamsport, Ohio.
Glenview Farm, The	Wilmington, Ohio.
Kreglow, G. C.	Ada, Ohio.
Long, R. G.	Alvada, Ohio.
Wood County Herd, The	Weston, Ohio.

POLAND CHINAS.

Barnhart Bros.	Mt. Vernon, Ohio.
Beatty, C. M. & F. A.	Orient, Ohio.
Becker, H. E.	Carroll, Ohio.
Besson, W. J & Son.	Etna Green, Ind.
Bowen, Alexander	Wren, Ohio.
Bowen, Bert C.	Wren, Ohio.
Brown, M. C. & Son.	Martinsville, Ohio.
Collins, Wm.	Carlisle, Ky.
Conrad & Lamka.	Troy, Ohio.
Gantz, E. E.	Orient, Ohio.
Grieve, A. C. & Son.	Xenia, Ohio.
Harmison, J. S.	Woodstock, Ohio.
Hunter, J. E.	Wren, Ohio.
Hunter, Thos. & Co.	Morrow, Ohio.
Jennings, S. E.	Williamsport, Ohio.
Keller, Chas. E.	Newark, Ohio.
Laird, E. R.	London, Ohio.
McDowell, O. P.	Plain City, Ohio.
Myers, Ora G.	Middletown, Ind.
Osborn, F. C.	Newark, Ohio.
Porter, C. W.	East Millsboro, Pa.
Reed, B. F.	Veedersburg, Ind.
Shepard & Osborn	Columbus, Ohio.
Smith, C. C.	Plain City, Ohio.
Stambaugh, N. E.	New Berlin, Ohio.
Stambaugh, Nelson.	New Berlin, Ohio.
Townsley, J. W.	Washington C. H., Ohio.
Wagner, N. W.	Fremont, Ohio.

TAMWORTHS.

Adams Bros.	Litchfield, Mich.
Elmendorf Farms.	Lexington, Ky.

YORKSHIRES.

Fisher, W. H.	Columbus, Ohio.
Kite, F. E.	St. Paris, Ohio.
Wheeler Homestead, The	Kanona, N. Y.

SHEEP.

CHEVIOTS.

Calland, W. D.	De Graff, Ohio.
Grieve, Raymond D.	Xenia, Ohio.
Parnell, G. W.	Wingate, Ind.
Postle, R. & W.	Camp Chase, Ohio.

SHEEP—Continued.

COTSWOLDS.

Page.	Postoffice.
Anoka Farms.....	Waukesha, Wis.
Hintz, Peter W.....	Clyde, Ohio.
McNeill, M. H.....	New Richmond, Ohio.

DORSETS.

Anoka Farms.....	Waukesha, Wis.
Cherry, H. H.....	Xenia, Ohio.
Henderson, J. B.....	Burgettstown, Pa.
Nash Bros.....	Tipton, Ind.

FAT SHEEP.

Henderson, J. B.....	Burgettstown, Pa.
Lethbridge, J. G. & Son.....	Alliance, Ont.
Postle, T. D.....	Camp Chase, Ohio.
Walnut Hall Farm.....	Donerail, Ky.

FRENCH MERINOS—RAMBOUILLET.

Fawcett, W. G. & Son.....	Chesterhill, Ohio.
Herd, J. B.....	East Liberty, Ohio.
Nash, H. L.....	Xenia, Ohio.
Orth & Mathews.....	McGuffey, Ohio.
Scott, J. K. & Co.....	Mt. Sterling, Ohio.
Shaw, J. M. & Son.....	Edison, Ohio.
Shaw, L. W.....	Pottersburg, Ohio.
Solt, Dr. C. H.....	Arlington, Ohio.

HAMPSHIRE DOWNS.

Cherry, W. J.....	Xenia, Ohio.
Mitchell, C. L.....	Lucas, Ohio.
Walnut Hall Farms.....	Donerail, Ky.

LINCOLNS.

Bickett, J. R.....	Xenia, Ohio.
Fielder, A. C.....	De Graff, Ohio.
Lethbridge, J. G. & Son.....	Alliance, Ont.
Lethbridge, Wm. S.....	Alliance, Ont.
Lile, W. A. & Son.....	West Liberty, Ohio.
Rice, C. S.....	Spencer, Ohio.

MERINOS—CLASS A.

Barker, Clarence W.....	Rochester, N. Y.
Bell, Chas. H.....	Ashley, Ohio.
Bell, David K.....	Rochester, N. Y.
Balmer, S. & Son.....	Johnstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, E. E.....	West Brownsville, Pa.
Cleaver, Ira A.....	West Brownsville, Pa.
Cleaver, S. M.....	Delaware, Ohio.
Dean, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J & Son.....	Pataskala, Ohio.
Freed & Stuart.....	Lancaster, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Staley, W. M.....	Marysville, Ohio.
Walker, J. F.....	Gambier, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown Ohio.

SHEEP—Continued.

MERINOS—CLASS B.

Name.	Postoffice.
Bell, Chas. H.....	Ashlev. Ohio.
Blamer, S. & Son.....	Johnsstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, E. E.....	West Brownsville, Pa.
Cleaver, Ira A.....	West Brownsville, Pa.
Cleaver, S. M.....	Delaware, Ohio.
Colville Bros.....	St. Louisville, Ohio.
Cook, Uriah & Sons.....	Peoria, Ohio.
Cook, W. N. & Son.....	New London, Ohio.
Dear, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J. & Son.....	Pataskala, Ohio.
Freed & Stuart.....	Lancaster, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Krantz, J. & Sons.....	Canal Dover, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Staley, W. M.....	Marysville, Ohio.
Walker, J. F.....	Gambier, Ohio.
Warehime, J. W.....	Salesville, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown, Ohio.

MERINOS—CLASS C.

Bell, Chas. H.....	Ashley, Ohio.
Bell, David K.....	Rochester, N. Y.
Balmer, S. & Son.....	Johnstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, Ira A.....	West Brownsville, Pa.
Colville Bros.....	St. Louisville, Ohio.
Cook, Uriah & Sons.....	Peoria, Ohio.
Cook, W. N. & Son.....	New London, Ohio.
Dean, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J. & Son.....	Pataskala, Ohio.
Harris, W. & Son.....	Edison, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Krantz, J. & Sons.....	Canal Dover, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Walker, J. F.....	Gambier, Ohio.
Warehime, J. W.....	Salesville, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown, Ohio.

OHIO BRED SHROPSHIRE.

Chaffee, H. W.....	Brecksville, Ohio.
Chambers, Ers & Sons.....	Mansfield, Ohio.
Hanna, James D.....	Rawson, Ohio.
Palmer, L. B.....	Pataskala, Ohio.
Postle, R. & W.....	Camp Chase, Ohio.
Postle, Walter D.....	Camp Chase, Ohio.
Ross, L. H.....	Bucyrus, Ohio.
Stallsmith, Geo. E.....	Urbana, Ohio.
Woodard, F. E.....	Forest, Ohio.
Wurtz, Pearl.....	Attica, Ohio.

OXFORD DOWNS.

Chambers, Ers & Sons.....	Mansfield, Ohio.
Haskett, Geo. W. Jr.....	Fulton, Ohio.
Simenton, A.....	Black Heath, Ont.
Williamson, J. C. & Son.....	Xenia, Ohio.

SHEEP—Continued.

COTSWOLDS.

Page.	Postoffice.
Anoka Farms.....	Waukesha, Wis.
Hintz, Peter W.....	Clyde, Ohio.
McNeill, M. H.....	New Richmond, Ohio.

DORSETS.

Anoka Farms.....	Waukesha, Wis.
Cherry, H. H.....	Xenia, Ohio.
Henderson, J. B.....	Burgettstown, Pa.
Nash Bros.....	Tipton, Ind.

FAT SHEEP.

Henderson, J. B.....	Burgettstown, Pa.
Lethbridge, J. G. & Son.....	Alliance, Ont.
Postle, T. D.....	Camp Chase, Ohio.
Walnut Hall Farm.....	Donerail, Ky.

FRENCH MERINOS—RAMBOUILLET.

Fawcett, W. G. & Son.....	Chesterhill, Ohio.
Herd, J. B.....	East Liberty, Ohio.
Nash, H. L.....	Xenia, Ohio.
Orth & Mathews.....	McGuffey, Ohio.
Scott, J. K. & Co.....	Mt. Sterling, Ohio.
Shaw, J. M. & Son.....	Edison, Ohio.
Shaw, L. W.....	Pottersburg, Ohio.
Solt, Dr. C. H.....	Arlington, Ohio.

HAMPSHIRE DOWNS.

Cherry, W. J.....	Xenia, Ohio.
Mitchell, C. L.....	Lucas, Ohio.
Walnut Hall Farms.....	Donerail, Ky.

LINCOLNS.

Bickett, J. R.....	Xenia, Ohio.
Fielder, A. C.....	De Graff, Ohio.
Lethbridge, J. G. & Son.....	Alliance, Ont.
Lethbridge, Wm. S.....	Alliance, Ont.
Lile, W. A. & Son.....	West Liberty, Ohio.
Rice, C. S.....	Spencer, Ohio.

MERINOS—CLASS A.

Barker, Clarence W.....	Rochester, N. Y.
Bell, Chas. H.....	Ashley, Ohio.
Bell, David K.....	Rochester, N. Y.
Balmer, S. & Son.....	Johnstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, E. E.....	West Brownsville, Pa.
Cleaver, Ira A.....	West Brownsville, Pa.
Cleaver, S. M.....	Delaware, Ohio.
Dean, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J. & Son.....	Pataskala, Ohio.
Freed & Stuart.....	Lancaster, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Staley, W. M.....	Marysville, Ohio.
Walker, J. F.....	Gambier, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown Ohio.

SHEEP—Continued.

MERINOS—CLASS B.

Name.	Postoffice.
Bell, Chas. H.....	Ashlev, Ohio.
Blamer, S. & Son.....	Johnsstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, E. E.....	West Brownsville, Pa.
Cleaver, Ira A.....	West Brownsville, Pa.
Cleaver, S. M.....	Delaware, Ohio.
Colville Bros.....	St. Louisville, Ohio.
Cook, Uriah & Sons.....	Peoria, Ohio.
Cook, W. N. & Son.....	New London, Ohio.
Dear, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J & Son.....	Pataskala, Ohio.
Freed & Stuart.....	Lancaster, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Krantz, J. & Sons.....	Canal Dover, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Staley, W. M.....	Marysville, Ohio.
Walker, J. F.....	Gambier, Ohio.
Warehime, J. W.....	Salesville, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown, Ohio.

MERINOS—CLASS C.

Bell, Chas. H.....	Ashley, Ohio.
Bell, David K.....	Rochester, N. Y.
Balmer, S. & Son.....	Johnstown, Ohio.
Calhoon Bros.....	Bronson, Mich.
Cleaver, Ira A.....	West Brownsville, Pa.
Colville Bros.....	St. Louisville, Ohio.
Cook, Uriah & Sons.....	Peoria, Ohio.
Cook, W. N. & Son.....	New London, Ohio.
Dean, A. H. & Son.....	West Mansfield, Ohio.
Deeds, J. J. & Son.....	Pataskala, Ohio.
Harris, W. & Son.....	Edison, Ohio.
Jobe, H. Homer.....	Xenia, Ohio.
Krantz, J. & Sons.....	Canal Dover, Ohio.
Lee Bros.....	Tunnel Hill, Ohio.
Lovett, Watson.....	Quincy, Ohio.
Quinn & Fawcett.....	Roxbury, Ohio.
Walker, J. F.....	Gambier, Ohio.
Warehime, J. W.....	Salesville, Ohio.
Williamson, R. D.....	Xenia, Ohio.
Wilson, J. M.....	Frederickstown, Ohio.

OHIO BRED SHROPSHIRE.

Chaffee, H. W.....	Brecksville, Ohio.
Chambers, Ers & Sons.....	Mansfield, Ohio.
Hanna, James D.....	Rawson, Ohio.
Palmer, L. B.....	Pataskala, Ohio.
Postle, R. & W.....	Camp Chase, Ohio.
Postle, Walter D.....	Camp Chase, Ohio.
Ross, L. H.....	Bucyrus, Ohio.
Stallsmith, Geo. E.....	Urbana, Ohio.
Woodard, F. E.....	Forest, Ohio.
Wurtz, Pearl.....	Attica, Ohio.

OXFORD DOWNS.

Chambers, Ers & Sons.....	Mansfield, Ohio.
Haskett, Geo. W. Jr.....	Fulton, Ohio.
Simenton, A.....	Black Heath, Ont.
Williamson, J. C. & Son.....	Xenia, Ohio.

SHEEP—Concluded.

SHROPSHIRE.

Name.	Postoffice.
Andrew, Jesse C.....	West Point, Ind.
Anoka Farms.....	Waukesha, Wis.
Chaffee, H. W.....	Brecksville, Ohio.
Chambers, Ers & Sons.....	Mansfield, Ohio.
Hanna, James D.....	Rawson, Ohio.
Palmer, L. B.....	Pataskala, Ohio.
Postle, R. & W.....	Camp Chase, Ohio.
Postle, Walter D.....	Camp Chase, Ohio.
Ross, L. H.....	Bucyrus, Ohio.
Stallsmith, Geo. E.....	Urbana, Ohio.
Woodard, F. E.....	Forest, Ohio.
Wurtz, Pearl.....	Attica, Ohio.

SOUTH DOWNS.

Anoka Farms.....	Waukesha, Wis.
Casey, A. M.....	Maysville, Ky.
Compton, W. H.....	Monroe, Ohio.
Mitchell, C. L.....	Lucas, Ohio.
Palmer, R. W.....	Pataskala, Ohio.
Postle, T. D.....	Camp Chase, Ohio.
Watt, R. C. & Son.....	Cedarville, Ohio.

EXHIBITS OF WOOL.

Bicketts, J. R.....	Xenia, Ohio.
Cherry, W. J.....	Xenia, Ohio.
Cleaver, Ira A.....	West Brownsville, Pa.
Cleaver, S. M.....	Delaware, Ohio.
Colville Bros.....	St. Louisville, Ohio.
Deeds, J. J. & Son.....	Pataskala, Ohio.
Henderson, J. B.....	Burgettstown, Pa.
Herd, C. O.....	Marysville, Ohio.
McNeill, M. H.....	New Richmond, Ohio.
Orth & Matthews.....	McGuffey, Ohio.
Palmer, L. B.....	Pataskala, Ohio.
Palmer, R. W.....	Pataskala, Ohio.
Postle, R. & W.....	Camp Chase, Ohio.
Robertson, J. W.....	Cadiz, Ohio.
Smith, D. T.....	Scio, Ohio.
Walker, J. F.....	Gambier, Ohio.
Wilson, J. M.....	Frederickstown, Ohio.

POULTRY.

Alexander, J. F. & J.....	Columbus, Ohio.
Allen, J. W.....	Newark, Ohio.
Anglemeier, C. S.....	Leetonia, Ohio.
Austin, Cyrus B.....	Delaware, Ohio.
Bellefontaine White Orpington Yards.....	Bellefontaine, Ohio.
Bensch Bros.....	Rocky Ridge, Ohio.
Boone, Dr. Geo. M.....	Coshocton, Ohio.
Bowden, Sherman.....	Mansfield, Ohio.
Brown, O. K.....	Ashland, Ohio.
Budd, Mrs. S. T.....	Clintonville, Ohio.
Calkins, B. H.....	Salem, Ohio.
Carey, L. G.....	Trimble, Ohio.
Carlisle Farm.....	Bellefontaine, Ohio.
Champion, Wm.....	Mt. Vernon, Ohio.
College Hill Poultry Farm.....	Cincinnati, Ohio.

POULTRY—Continued.

Name.	Postoffice.
Corfman, James.....	Leipsic, Ohio.
Corkwell, F. E.....	West Main St., Newark, Ohio.
Cram, Mrs. C. E.....	Carey, Ohio.
Crum, Russell.....	Upper Sandusky, Ohio.
Darst, C. N.....	Jacksonville, Ohio.
Dawson, W. E.....	Columbus, Ohio.
Eddy, E. E.....	Trimble, Ohio.
Frank, Julius & Sons.....	Akron, Ohio.
Dumond, W. A.....	671 Wilson Ave., Columbus, Ohio.
Dysart Bros.....	Belmont, Ohio.
Golden & Seott.....	Athens, Ohio.
Greshel, Altman.....	Ashley, Ohio.
Hartman Stock Farm.....	Columbus, Ohio.
Helman, Chas. W.....	Waverly, Ohio.
Henderson, Ralph.....	Marysville, Ohio.
Herring, E. C.....	Mt. Vernon, Ohio.
Higgey, Michael F.....	1381 South High St., Columbus, Ohio.
Hilt, Mrs. Bertha.....	Jacksonville, Ohio.
Hisey, J. A.....	Ashland, Ohio.
Hughson, Walter E.....	Clay, N. Y.
Jacot, W. T.....	Apple Creek, Ohio.
Joyce, M. A.....	Columbus, Ohio.
Leaman, A. H.....	Columbus, Ohio.
Leshey, Henry.....	Columbus, Ohio.
Light, Mrs. S. R.....	McComb, Ohio.
Limes, W. S.....	Linden Heights, Ohio.
Long, Scott.....	Carey, Ohio.
Loury, Dr. A. F.....	Cambridge, Ohio.
McCabe, Sylvester T.....	Columbus, Ohio.
McClave, Chas.....	New London, Ohio.
McClave & Ringler.....	Rochester, Ohio.
McGrath, C. S.....	Apple Creek, Ohio.
Mead, R. W.....	Norwalk, Ohio.
Mebs, Fred J.....	Columbus, Ohio.
Michener & Seas.....	Orrville, Ohio.
Miles, Oscar E.....	Hartman Bldg., Columbus, Ohio.
Miller, Dr. Edward.....	735 West Mulberry St., Springfield, Ohio
Model Poultry Farm.....	R. D. 3, Springfield, Ohio.
Moore, Geo. S.....	Clintonville, Ohio.
Myers, J. I.....	New Dover, Ohio.
Myers, M. M.....	Marysville, Ohio.
Norris, G. B.....	521 West Fourth Ave., Columbus, Ohio.
Osbun Poultry Farm.....	Mansfield, Ohio.
Painter, W. Sewell.....	Bellefontaine, Ohio.
Pease, C. L.....	42 Hudson St., Columbus, Ohio.
Perry, L. H.....	Clay, N. Y.
Rainey, A. M.....	Trimble, Ohio.
Rauch, Irwin S.....	Columbiana, Ohio.
Recob, Frank.....	427 York St., Springfield, Ohio.
Rice, C. S.....	Spencer, Ohio.
Ricketts, F. H.....	Coshocton, Ohio.
Roloson, E. P.....	Delaware, Ohio.
Rounds, Robt. C.....	Gorham, Me.
Scott, Paul R.....	Clintonville, Ohio.
Shaw, M. B.....	Cardington, Ohio.
Sheffield Farm.....	Glendale, Ohio.
Sheppard, Howard M.....	400 East Seventeenth Ave., Columbus, Ohio.
Sites, Frank.....	North Dover, Ohio.
Skeen, James & Son.....	Clintonville, Ohio.
Smith, C. W.....	Cardington, Ohio.
Smith, Judd.....	869 Leonard St., Fostoria, Ohio.
Sommers, S. W.....	Apple Creek, Ohio.
Stephenson, J. L.....	Jacksonville, Ohio.
Stewart, G. F.....	Coshocton, Ohio.
Stier, Frank C.....	2705 Marion Ave, Cleveland, Ohio.

POULTRY—Concluded.

Name.	Postoffice.
Stonesmith, Wm.....	Columbus, Ohio.
Stoodt, A. L.....	Mansfield, Ohio.
Stream, Luther A.....	Mt. Vernon, Ohio.
Studebaker, Dr. J. E.....	621 West Pleasant St., Springfield, Ohio.
Tetrick, E. T.....	Waverly, Ohio.
Trout & Nusser.....	R. 2, Fostoria, Ohio.
Ustick, E. L.....	Columbus, Ohio.
Vesey, E. C. & Son.....	Painesville, Ohio.
Watts, W. R.....	Columbus, Ohio.
Williams, Gerald.....	Wellington, Ohio.
Wilson Bros.....	82 West Columbia St., Springfield, Ohio.
Wilson & Chambers.....	Doylestown, Ohio.
Wright, Geo. K.....	Ashville, Ohio.
Ziegler, D. L.....	Delaware, Ohio.

FARM PRODUCTS.

Anderson, J. L & Son.....	Worthington, Ohio.
Anderson, Raymond.....	Worthington, Ohio.
Bailey, H. P.....	R. 8, Sidney, Ohio.
Bailey, W. W.....	Yellow Springs, Ohio.
Barnhart, R. R.....	Grafton, Ohio.
Bartholomew & Shaw.....	Huntsburg, Ohio.
Bieber, Mrs. H.....	Delaware, Ohio.
Breece, C. C.....	R. 3, Delaware, Ohio.
Columbus Market Gardeners' Ass'n.....	Columbus, Ohio.
Cooksley, S. B.....	St. Joseph, Mo.
Coyner, R. G.....	Lyndon, Ohio.
Craig, Hilas E.....	Groveport, Ohio.
Denham, J. H.....	New Concord, Ohio.
Doebert, Nelson.....	R. D., West Mansfield, Ohio.
Edward, Ernest.....	Lancaster, Ohio.
Ferguson, W. W.....	Delaware, Ohio.
Fernean, J. O.....	Fruit Dale, Ohio.
Goodrich, Jessie.....	Powell, Ohio.
Grant, Mrs. Frank.....	Tonica, Ill.
Haven, C. E.....	Grafton, Ohio.
Hepler, P. M.....	127 West High St., Circleville, Ohio.
Husted, Elmer.....	Husted, Ohio.
Johnson, Earl T.....	R. 4, Painesville, Ohio.
Keckley, I. B.....	R. 3, Marysville, Ohio.
Keckley, J. L.....	R. 3, Marysville, Ohio.
Kennedy, Mrs. T. H.....	373 Marshall Ave., Columbus, Ohio.
Larkin, Laura A.....	South Charleston, Ohio.
Larkin, Paul P.....	South Charleston, Ohio.
Leavitt, C. E.....	Mechanicsburg, Ohio.
Lee, Geo. W.....	R. 1, Canal Winchester, Ohio.
Licking Creamery Co.....	Newark, Ohio.
Lienard, E. E.....	Lancaster, Ohio.
McConnell, C. M.....	Woodstock, Ohio.
Moore & Ross.....	Columbus, Ohio.
Morris, Wilber E.....	R. 4, Urbana, Ohio.
Pearce, Albert.....	68 East Tallmadge St., Akron, Ohio.
Peterson, M. Luther.....	Frankfort, Ohio.
Powell, A. H.....	Newark, Ohio.
Pure Milk Co.....	Columbus, Ohio.
Purks, J. T.....	Newark, Ohio.
Rice, C. S.....	Spencer, Ohio.
Ruff, Mrs. T. G.....	Lancaster, Ohio.
Schneider, Gustav.....	Springfield, Ohio.
Scott, G. W.....	Carroll, Ohio.
Shellhammer, W. C.....	R. 2, Greenspring, Ohio.
Springfield Pure Milk Co.....	Springfield, Ohio.

FARM PRODUCTS—Concluded.

Name.	Postoffice.
Stiffler, G. W. & A. T.....	Prospect, Ohio.
Stuart, Mary.....	Jacksontown, Ohio.
West Jefferson Creamery Co.....	Columbus, Ohio.
Whipple, John.....	Pomeroy, Ohio.
Whipps, F. M.....	R. 2, Peoria, Ohio.
Whipps, W. D.....	Marion, Ohio.
White, J. E.....	Greenfield, Ohio.
Wildman, G. W.....	R. 8, Springfield, Ohio.

HORTICULTURE.

Bieber, Warren.....	Delaware, Ohio.
Bookwater, Harry.....	Hallsville, Ohio.
Boyd, Mrs. Fanny E.....	120 West Lane Ave., Columbus, Ohio.
Brenneman, E. A.....	Camp Chase, Ohio.
Burkholder, H.....	Clyde, Ohio.
Campe, Adolph.....	Columbus, Ohio.
Carson Bros.....	Middleport, Ohio.
Cleveland, Geo. & Son.....	Galena, Ohio.
Colville Bros.....	St. Louisville, Ohio.
Counter, C. W.....	Nicholas Bldg., Toledo, Ohio.
Cox, E. G.....	Proctorville, Ohio.
Cox, U. T.....	Proctorville, Ohio.
Cushman Gladiolus Co.....	Sylvania, Ohio.
Eaton, J. P.....	Proctorville, Ohio.
Eaton, L. D.....	Proctorville, Ohio.
Edward, Ernest.....	Lancaster, Ohio.
Eggert, Mrs. A. C.....	1305 Forsythe Ave., Columbus, Ohio.
Eggert, Mrs. S. O.....	Massillon, Ohio.
Elliott, Edith.....	190 East Mound St., Columbus, Ohio.
Farnsworth, W. W.....	Waterville, Ohio.
Forbes, Frances Louise.....	246 Marshall Ave., Columbus, Ohio.
Freed, C. L.....	R. 1, Lancaster, Ohio.
Gill, S. R. & Sons.....	Port Clinton, Ohio.
Gilliland, S. C.....	Pomeroy, Ohio.
Hagler, Moses A.....	Xenia, Ohio.
Hall, Doris.....	Milo, Ohio.
Hall, E. M.....	190 E. Mound St., Columbus, Ohio.
Hanlin, R. C.....	Newark, Ohio.
Huron, H. H.....	New Marshfield, Ohio.
Hinton, M. E.....	Woodstock, Ohio.
Hoffman, John C.....	R. 1, Lancaster, Ohio.
Housel, Mrs. Louise J.....	1305 Forsythe Ave., Columbus, Ohio.
Hutchinson, Fred.....	Clyde, Ohio.
Hutchinson, Mabel.....	Clyde, Ohio.
Indianola Florists.....	Columbus, Ohio.
Johnson, A. E.....	Port Clinton, Ohio.
Johnson & Gill.....	Port Clinton, Ohio.
Johnson, Mrs. T. S.....	Port Clinton, Ohio.
Kiefaber, H. C.....	R. 1, Frankfort, Ohio.
Lee, Geo. W.....	R. 1, Canal Winchester, Ohio.
Lienard, E. E.....	Lancaster, Ohio.
Livingston Seed Co.....	Columbus, Ohio.
Lockwood, Burt.....	Port Clinton, Ohio.
Mauck, H. B.....	Proctorville, Ohio.
Miller & Gill.....	Port Clinton, Ohio.
Miller, Wm.....	Port Clinton, Ohio.
Morris, Wilbur E.....	R. 4, Urbana, Ohio.
Ortman, W. H.....	Hallsville, Ohio.

HORTICULTURE—Concluded.

Name.	Postoffice.
Peach, Geo.....	Toledo, Ohio.
Peterson, M. Luther.....	Frankfort, Ohio.
Prosser, Fred Jr.....	1103 Pennsylvania Ave, Columbus, Ohio.
Riggs, Ernest J.....	Raccoon Island, Ohio.
Ropp, J. L.....	Canal Winchester, Ohio.
Sampson, Mrs. B. F.....	1103 Pennsylvania Ave., Columbus, Ohio
Seeling, Fred.....	Chillicothe, Ohio.
Shively, M. I.....	Chillicothe, Ohio.
Simons, Horace J.....	Gallipolis, Ohio.
Smith, Miss Rachel M.....	R. 1, Trinway, Ohio.
Stettner & Reynolds.....	Columbus, Ohio.
Stewart, J. B.....	R. 5, Thornville, Ohio.
Stokes, J. A & Sons.....	Fremont, Ohio.
Stretcher, E. E.....	Springfield, Ohio.
Stretcher, Robt. H.....	Yellow Springs, Ohio.
Stuart, Mary.....	Jacksontown, Ohio.
Sucksinger, S. D.....	Port Clinton, Ohio.
Unternaker, John C.....	R. 6, Newark, Ohio.
West, W. H.....	Chillicothe, Ohio.
West, W. S.....	Chillicothe, Ohio.
Wheaton, C. S.....	Port Clinton, Ohio.

WOMAN'S WORK AND FINE ARTS DEPARTMENT.

Ackley, Caroline G.....	59 North Champion Ave., Columbus, Ohio.
Ackley, Louise H.....	59 North Champion Ave., Columbus, Ohio.
Anderson, Mrs. C. S.....	Columbus, Ohio.
Andes, Mrs. Anna.....	218 Wallace St., Marion, Ohio.
Arbuckle, Miss Mable.....	Shepard, Ohio.
Armstrong, Lulu.....	37 West Third Ave., Columbus, Ohio.
Armstrong, M. Della.....	Yellow Springs, Ohio.
Bailey, Mrs. Minnie R.....	Yellow Springs, Ohio.
Baird, Edith M.....	1645 North Fourth St., Columbus, Ohio.
Baker, Donald M.....	Box 226, Westerville, Ohio.
Banning, Mrs. Edna.....	310 W. Vine St., Mt. Vernon, Ohio.
Banning, Mrs. Wm. Jr.....	200 West High St., Mt. Vernon, Ohio.
Bargdill, Mrs. Geo.....	92 East Central Ave., Delaware, Ohio.
Barnhart, Mrs. R. R.....	Grafton, Ohio.
Bartholomew & Shaw.....	Huntsburg, Ohio.
Bates, Mrs. R. T.....	115 North Broadway, Dayton, Ohio.
Becker, Mrs. Tatum.....	109 Chittenden Ave., Columbus, Ohio.
Beeman, Mrs. Jessie.....	310 West Vine St., Mt. Vernon, Ohio.
Berry, Miss Norma C.....	310 West Fifth Ave., Columbus, Ohio.
Beymer, Mrs. Wm.....	146 West Eighth Ave., Columbus, Ohio.
Bieber, Mrs. H.....	R. 3, Delaware, Ohio.
Bieber, Minnie.....	R. 3, Delaware, Ohio.
Binkley, Mrs. Clara J.....	445 West Second Ave., Columbus, Ohio.
Bitzer, Mrs. Elizabeth.....	647½ North High St., Columbus, Ohio.
Bitzer, Mrs. John.....	281 Seventeenth Ave., Columbus, Ohio.
Blesh, Miss Clara.....	198 South Third St., Columbus, Ohio.
Blesh, Miss Emma.....	198 South Third St., Columbus, Ohio.
Blue, Maude.....	167 West Ninth Ave., Columbus, Ohio.
Blue, Mrs. J. M.....	167 West Ninth Ave., Columbus, Ohio.
Bogner, Pearl.....	496 Chilcote St., Columbus, Ohio.
Borroee, Mrs. H. W.....	276 Ogden Ave., Columbus, Ohio.
Bowman, Miss Ruth.....	46 West Tenth Ave., Columbus, Ohio.
Bowne, Mrs. D. A.....	2598 Medary Ave., Columbus, Ohio.
Boyd, Fanny E.....	120 West Lane Ave., Columbus, Ohio.
Boyd, Mary A.....	120 West Lane Ave., Columbus, Ohio.
Brenneman, Mrs. E. A.....	Camp Chase, Ohio.

WOMAN'S WORK AND FINE ARTS DEPARTMENT—Continued.

Name.	Postoffice.
Bright, Marian	174 Hamilton Ave., Columbus, Ohio.
Brittain, Mrs. G. E.	900 Manhattan Ave., Dayton, Ohio.
Buck, Mrs. E.	415 Arlington Ave., Lockland, Ohio.
Busser, Celia	Box 34, Piqua, Ohio.
Byerly, G.	Chillicothe, Ohio.
Campbell, Minerva	2045 North Fourth St., Columbus, Ohio.
Carson, Nellie	70 University Ave., Delaware, Ohio.
Chamberlain, K. R.	Westerville, Ohio.
Cheney, A. L. B.	1344 East 63d St., Chicago, Ill.
Clutter, Mrs. M. B.	R. 3, Pataskala, Ohio.
Coler, Lillian	83 West Ninth Ave., Columbus, Ohio.
Corbin, Miss Ruth	425 Smead Ave., Columbus, Ohio.
Covalt, Amelia D.	Mechanicsburg, Ohio.
Covalt, Mrs. L. C.	Mechanicsburg, Ohio.
Covalt, Mrs. W. H.	Mechanicsburg, Ohio.
Cowgill, Mrs. Agnes	61 Chittenden Ave., Columbus, Ohio.
Cowser, Mrs. H. L.	383 12th Ave., Columbus, Ohio.
Coyner, D. G.	Lyndon, Ohio.
Creamer, Cora L.	671 South Main St., Dayton, Ohio.
Cummings, Mrs. Grace	Station B, R. 1, Columbus, Ohio.
Dale, Mrs. R. A.	292 Sixteenth Ave., Columbus, Ohio.
Dannenber, Mrs. M. L.	1437 Fair Ave., Columbus, Ohio.
Davidson, Lillie M.	109 Innis Ave., Columbus, Ohio.
Davis, Elizabeth	1543 East 61st St., Chicago, Ill.
Dillon, Mrs. Lena	Gallipolis, Ohio.
Docherty, Mary	437 West Fourth Ave., Cloumbus, Ohio.
Earl, Robt. M.	2278 Summit St., Columbus, Ohio.
Earl, Mrs. W. D.	2278 Summit St., Columbus, Ohio.
Earnest, Meta	1059 East Long St., Columbus, Ohio.
Eggert, Mrs. A. C.	1305 Forsythe Ave., Columbus, Ohio.
Elliott, Mrs. Geo.	185 East Town St., Columbus, Ohio.
Emerson, Sybil	1832 Summit St., Columbus, Ohio.
Emminger, Mrs. A. F.	880 East Broad St., Columbus, Ohio.
Essig, Mrs. Margaret A.	311 Marion St., Canton, Ohio.
Fanley, Albert C.	1427 Eastwood Ave., Columbus, Ohio.
Fanley, Mrs. A. C.	1427 Eastwood Ave., Columbus, Ohio.
Faust, Mrs. Mary	22 Estelle St., Delaware, Ohio.
Fearn, Fanny	Groveport, Ohio.
Fenstermacher, Mrs. C.	320 Old Dayton Road, Springfield, Ohio.
Fidler, Alice Luella	Geneva, N. Y.
Fidler, Elsie Catherine	Geneva, N. Y.
Florence, Mrs. N. W.	574 Franklin Ave., Columbus, Ohio.
Fogle, Mrs. Clara G.	Mt. Gilead, Ohio.
Forbes, Mrs. W. A.	246 Marshall Ave., Columbus, Ohio.
Foster, Mrs. R. M.	Waverly, Ohio.
Foster, Mrs. Wm. R.	647 Oakwood Ave., Columbus, Ohio.
Frasier, Mrs. F. F.	63 Euclid Ave., Columbus, Ohio.
Fransis, Miss Ruth	Grove City, Ohio.
Fuller, Lulu	895 Dennison Ave., Columbus, Ohio.
Gale, Chas. F.	91 North Twentieth St., Columbus, Ohio.
Gardiner, Mrs. Marvel	138 East Eighth Ave., Columbus, Ohio.
Gaskell, Mrs. Esther D.	230 West Eighth St., Canton, Ohio.
Gearhart, Mrs. Emma	117 East Crawford St., Van Wert, Ohio.
Gearhart, Ivy A.	117 East Crawford St., Van Wert, Ohio.
George, Mrs. Gertrude	393 Taylor Ave., Columbus, Ohio.
Gibson, Estella	307 West Fifth St., Marysville, Ohio.
Gifford, Mrs. N. P.	801 Beech St., Columbus, Ohio.
Gilbert, Mrs. Amaretta	1490 Wesley Ave., Columbus, Ohio.
Godard, Mary	1038 Oak St., Columbus, Ohio.
Goodrich, Jessie	Powell, Ohio.
Gray, Mrs. J. C.	West Unity, Ohio.
Green, Paul	R. 5, Columbus, Ohio.
Gregg, Mrs. Laura	Washington C. H., Ohio.
Greiner, Mrs. Ed	73 East William St., Delaware, Ohio.

WOMAN'S WORK AND FINE ARTS DEPARTMENT—Continued.

Name.	Postoffice.
Grey, Mrs. Margaret.....	795 Beech St., Columbus, Ohio.
Groom, Mrs. J. E.....	797 Bruck St., Columbus, Ohio.
Groom, Mrs. Mat ie W.....	797 Bruck St., Columbus, Ohio.
Gruge, Miss Flora.....	603 East Town St., Columbus, Ohio.
Hain, Miss Mabel.....	1749 North Fourth St., Columbus, Ohio.
Hain, Mrs. R. P.....	1749 North Fourth St., Columbus, Ohio.
Hall, Miss Nannie.....	838 West High St., Lexington, Ky.
Hanning, Miss.....	51 Chittenden Ave., Columbus, Ohio.
Harner, Miss Lillian.....	74 N. Monroe Ave., Columbus, Ohio.
Hart, Mrs. May.....	411 East Fourteenth Ave., Columbus, Ohio.
Henrie, Miss Harriet.....	Xenia, Ohio.
Hensel, G. L. M.....	Basil, Ohio.
Hervey, Jennie M.....	Wheeling, W. Va.
Higgins, Mrs. Jessie.....	1257 East Long St., Columbus, Ohio.
Himmegeer, Mrs. Wm. A.....	677 Park St., Marion, Ohio.
Hinsey, Maud C.....	Pekin, Ill.
Hobbs, Miss.....	310 West Vine St., Mt. Vernon, Ohio.
Hodgison, Mary.....	1620 Harvard Ave., Columbus, Ohio.
Holten, Miss Winifred.....	611 N. Wittenberg Ave., Springfield, Ohio.
Holten, Mrs. W. S.....	611 N. Wittenberg Ave., Springfield, Ohio.
Hopkins, Mrs. J.....	902 Manhattan Ave., Dayton, Ohio.
Hotchkiss, Florence R.....	360 West Second Ave., Columbus, Ohio.
Hotchkiss, T. T.....	360 West Second Ave., Columbus, Ohio.
Housel, Mrs. Louise.....	1305 Forsythe Ave., Columbus, Ohio.
Howard, Cornelia.....	725 South Champion Ave., Columbus, Ohio.
Howell, Mrs. F. E.....	Dayton, Ohio.
Howland, Mrs. O. K.....	Plain City, Ohio.
Hull, Mrs. E. C.....	880 E. Broad St., Columbus, Ohio.
Humphrey, Mrs. W. S.....	Sta. B. R. 7, Columbus, Ohio.
Innis, Mrs. Louis.....	1053 Madison Ave., Columbus, Ohio.
Jackson, Tom.....	1159 East Long St., Columbus, Ohio.
James, Mrs. Wm.....	312 East Broad St., Columbus, Ohio.
Jeigler, Nellie.....	550 Oak St., Columbus, Ohio.
Jennings, Mrs. Frank.....	61 West Eleventh Ave., Columbus, Ohio.
Jennings, Mrs. M. W.....	4232 Delaney St., Cincinnati, Ohio.
Jennings, Mrs. W. H.....	196 West Sixth Ave., Columbus, Ohio.
Johnson, Abner.....	Eaton, Ohio.
Johnson, Mrs. Ettie.....	Eaton, Ohio.
Johnson, L. V.....	142 South Jefferson St., Dayton, Ohio.
Jones, Miss Letitia A.....	27 North Twentieth St., Columbus, Ohio.
Justice, Mrs. Bess M.....	531 Oakwood Ave., Columbus, Ohio.
Kehoe, Miss Elra.....	West Unity, Ohio.
Kellenburger, Mrs. H. H.....	2158 Indiana Ave., Columbus, Ohio.
Kelsey, Dorothy L.....	59 North Champion Ave., Columbus, Ohio.
Kibbe, Mrs. Louise.....	1403 Huron St., Toledo, Ohio.
Kieler, S.....	147 North Maynard Ave., Columbus, Ohio.
Kighr, Mrs. W. B.....	603 East Town St., Columbus, Ohio.
Killitts, Mrs. Fred.....	2492 Findlay Ave., Columbus, Ohio.
Kirkpatrick, Mrs. W. A.....	179 Chittenden Ave., Columbus, Ohio.
Klippart, Josephine.....	275 East Town St., Columbus, Ohio.
Krauss, Miss Bertha K.....	State Library, Columbus, Ohio.
Krumm, Ruby.....	416 Luckhaupt Ave., Columbus, Ohio.
Gushner, Glenn R.....	40 South Fourth St., Columbus, Ohio.
Lanman, Anna B.....	1447 Fair Ave., Columbus, Ohio.
Lannes, Mrs. Maud.....	801 Beech St., Columbus, Ohio.
Larkin, Laura A.....	South Charleston, Ohio.
Lee, Mrs. Geo.....	R. 1, Canal Winchester, Ohio.
Leger, Mrs. Mary.....	608 City Park Ave., Columbus, Ohio.
Leigh, Miss Elizabeth.....	Groveport, Ohio.
Ludwig, Amelia E.....	423 South Champion Ave., Columbus, Ohio.
Lundberg, Aug. F.....	48 North Grant Ave., Columbus, Ohio.
Lynas, Jack.....	110 Masonic Temple, Chicago, Ill.
McClure, Mrs. Roy T.....	Washington C. H., Ohio.
McCord, Mrs. J. C.....	Ashville, Ohio.

WOMAN'S WORK AND FINE ARTS DEPARTMENT—Continued.

Name.	Postoffice.
McCoy, Myrtle.....	Washington C. H., Ohio.
McGuier, Mary A.....	1824 East Broad St., Columbus, Ohio.
McIntyre, Lou.....	1733 Summit St., Columbus, Ohio.
McIntyre, Marie.....	1733 Summit St., Columbus, Ohio.
McKelvey, Mrs. J. S.....	552 Franklin Ave., Columbus, Ohio.
McLaughlin, Mary.....	47 West Third Ave., Columbus, Ohio.
McLaughlin, Mrs. T. E.....	174 Hamilton Ave., Columbus, Ohio.
McNab, Mrs. Josephine.....	Nellie, Ohio.
Malay, Mrs. Geo.....	137 Sherman Ave., Columbus, Ohio.
Martin, Mrs. F. R.....	Roscoe, Ohio.
Matson, Grace B.....	Ashtabula, Ohio.
Maynard, Mrs. Hattie.....	296 Cypress Ave., Columbus, Ohio.
Mettera, Mrs. Rose.....	848 N. Ninth St., Springfield, Ill.
Millar, Mrs. Grace.....	Route 4, Ashville, Ohio.
Miller, Miss Anne.....	621 Locust St., Quincy, Ill.
Miller, Miss H. A.....	Westerville, Ohio.
Miller, Mrs. O. J.....	Mt. Gilead, Ohio.
Mitten, Mrs. W. D.....	621 Star Ave., Columbus, Ohio.
Moore, Cora E.....	2193 Cornell Road, Cleveland, Ohio.
Mosteller, Carrie F.....	118 Elmwood Ave., Newark, Ohio.
Mosteller, Mrs. Emily H.....	120 Elmwood Ave., Newark, Ohio.
Mosteller, Eva B.....	Newark, Ohio.
Myers, Maud.....	Roundhead, Ohio.
Naragon, Mrs. A. C.....	Canal Dover, Ohio.
Nausbaum, Miss Carrie.....	619 E. Main St., Columbus, Ohio.
Osborn, Helen H.....	Sta. B, R. 7, Columbus, Ohio.
Owings, Edna.....	1085 Franklin Ave., Columbus, Ohio.
Oyler, Mrs. Frank.....	144 Warren St., Columbus, Ohio.
Paini, Silbio.....	345 Kossuth St., Columbus, Ohio.
Parker, Mrs. J. W.....	19 N. Liberty St., Delaware, Ohio.
Peck, Mrs. Frances.....	1369 Forsythe Ave., Columbus, Ohio.
Peters, Mrs. Earl.....	927 Liberty St., Ft. Wayne, Ind.
Piersche, John N.....	150 W. Maynard Ave., Columbus, Ohio.
Porter, Mrs. Della.....	769 Neil Ave., Columbus, Ohio.
Preston, Ella M.....	R. 2, E. Akron, Ohio.
Price, Mrs. Minnie.....	164 W. Fifth Ave., Columbus, Ohio.
Priest, Mrs. R. W.....	365 W. Fourth Ave., Columbus, Ohio.
Prior, Mrs. C. F.....	594 Oakwood Ave., Columbus, Ohio.
Prior, F. E.....	594 Oakwood Ave., Columbus, Ohio.
Pulliam, Mrs. L. J.....	1020 S. Seventh St., Springfield, Ill.
Rambo, Mrs. C. M.....	Zanesville, Ohio.
Rannells, Will.....	Box 624, Zanesville, Ohio.
Rhoades, Lavina.....	179 Chittenden Ave., Columbus, Ohio.
Rhoades, Mrs. Wm.....	181 Chittenden Ave., Columbus, Ohio.
Rice, Charlotte H.....	1616 S. Fountain Ave., Springfield, Ohio.
Richards, Miss Anne.....	1372 Eastwood Ave., Columbus, Ohio.
Richards, Mrs. Gorner.....	100 N. Ohio Ave., Columbus, Ohio.
Richey, Mrs. Sarah E.....	1495 E. Main St., Columbus, Ohio.
Rockey, Mrs. C. J.....	27 E. Gambier St., Mt. Vernon, Ohio.
Rockwell, Mrs. L. E.....	2069 Cedar St., Quincy, Ill.
Ruff, Mrs. T. G.....	Lancaster, Ohio.
Russell, Mary W.....	441 E. Grand Ave., Springfield, Ohio.
Ryan, Miss Lenora.....	322 Wilbur Ave., Columbus, Ohio.
Sampson, Mrs. B. F.....	1103 Penna. Ave., Columbus, Ohio.
Schille, Alice.....	1166 Bryden Road, Columbus, Ohio.
Schmitt, Frank.....	1153 Yeager St., Columbus, Ohio.
Scofield, Carmela.....	913 Pennsylvania Ave., Columbus, Ohio.
Scott, Anna N.....	1274 Summit St., Columbus, Ohio.
Scott, Miss Daisy M.....	1274 Summit St., Columbus, Ohio.
Scott, Mrs. Hulda.....	South Main St., Kenton, Ohio.
Seamon, Garnet.....	1194 Fair Ave., Columbus, Ohio.
Seligue, Miss Mary.....	310 W. Vine St., Mt. Vernon, Ohio.
Shafe, Miss Alma.....	Cambridge, Ohio.
Shook, Mrs. Belle.....	625 S. Main St., Kenton, Ohio.

WOMAN'S WORK AND FINE ARTS DEPARTMENT—Concluded.

Name.	Postoffice.
Sibley, Ferol.....	103 W. Patterson Ave., Columbus, Ohio.
Skillman, Mrs. E. R.....	113 S. Boulevard, Dayton, Ohio.
Smiley, Ethel M.....	1473 Pennsylvania Ave., Columbus, Ohio.
Smith, Miss Allie.....	131 W. First Ave., Columbus, Ohio.
Smith, Mrs. A. P.....	1401 Chase Ave., Cincinnati, Ohio.
Smith, Mrs. C. E.....	Box 87, Malta, Ohio.
Smith, Miss Fannie.....	131 W. First Ave., Columbus, Ohio.
Smith, Miss Rachel M.....	R. 1, Trinway, Ohio.
Smysor, Mrs. W. B.....	R. 2, Cozadale, Ohio.
Souders, Mrs. H. B.....	117 Chittenden Ave., Columbus, Ohio.
Steward, Mary.....	Jacksontown, Ohio.
Stewart, H. E.....	R. 5, Thornville, Ohio.
Stockstill, Mrs. Sara.....	671 S. Main St., Dayton, Ohio.
Swartz, Mrs. H. J.....	63 E. Second Ave., Columbus, Ohio.
Talbutt, Miss Elizabeth.....	838 W. High St., Lexington, Ky.
Taylor, Mrs. F. D.....	Springfield, Ill.
Thurston, Nellie.....	Ohio State University, Columbus, Ohio.
Tidball, J. S.....	350 Twentieth Ave., Columbus, Ohio.
Tompkins, Mrs. A. W.....	2264 N. Delaware, Indianapolis, Ind.
Totten, Bessie L.....	Box 221, Yellow Springs, Ohio.
Townsend, Mary.....	37 W. Third Ave., Columbus, Ohio.
Tucker, Mina.....	310 W. Vine St., Mt. Vernon, Ohio.
Tyner, Regina.....	305 S. Main St., Marion, Ohio.
Upsyick, Mrs. E. E.....	Sta. A, Columbus, Ohio.
Ustick, Faye S.....	Sta. A, Columbus, Ohio.
Vance, Fred N.....	414 E. Jefferson St., Crawfordsville, Ind.
Van Horn, Mrs. H. T.....	653 E. Fifth Ave., Columbus, Ohio.
Vorheis, Miss Alice.....	19 N. Liberty St., Delaware, Ohio.
Walter, Mrs. H. W.....	Lancaster, Ohio.
Warman, Miss L. P.....	2727 Harris Ave., Norwood, Ohio.
Warthen, Lee R.....	Care of W. Dietzel, Shepard, Ohio.
Waters, R. K.....	R. 5, Columbus, Ohio.
Weekly, Mrs. C. C.....	Ellenboro, W. Va.
Weir, Mrs. W. C.....	47 Greenwood Ave., Columbus, Ohio.
Weishaupt, Mrs. Ed.....	605 W. State St., Columbus, Ohio.
Welch, Mrs. Wm.....	2339 Broadway, Indianapolis, Ind.
Wild, Mrs.....	Columbus, Ohio.
Wilson, Mrs. R. K.....	Rennerdale, Pa.
Wiltberger, Mrs. E.....	Columbus, Ohio.
Wiltberger, Laura Belle.....	Columbus, Ohio.
Wiltberger, Virginia.....	Columbus, Ohio.
Wolff, Mrs. W. B.....	22 Augustine Ave., Mansfield, Ohio.
Wood, Miss Helen.....	Cliff St., Springfield, Ohio.
Wood, Robin.....	1194 Fair Ave., Columbus, Ohio.
Wright, Mrs. E. B.....	99 Belvedere Ave., Columbus, Ohio.
Wrinkle, Mrs. J. S.....	1257 E. Long St., Columbus, Ohio.
Young, Mrs. C. F.....	Box 783 Sta. B, Columbus, Ohio.
Young, Mrs. J. W.....	736 William St., Delaware, Ohio.
Zell, Ernest N.....	Sta. A, Columbus, Ohio.
Zumkeller, Louise.....	322 Third Ave., Dayton, Ky.

Official Report of the
SECRETARY
OF THE
Ohio State Board of Agriculture
ON
COMMERCIAL FERTILIZERS
Licensed to be Sold
During the Year 1912

(407)

GREETINGS, 1912

This report is a text book on commercial fertilizers. It contains common sense facts which farmers ought to know. The information given herein is by practical men.

The fertilizer "Situation" much improved. Manufacturers are disposed to be helpful and deal fairly with consumers.

Farmers are buying plant food intelligently. They seek to discover the needs of soil and then supply the lacking elements, and thus get "value received" for their money.

More brands of fertilizer were licensed in 1912 than ever before. Inspectors draw and seal samples in presence of witnesses whenever possible. These samples are registered by number in the office and go for analysis to the chemist who does not know whose goods he is analyzing or the name of the brand, or what is claimed for it.

Without fear or favor, the brands falling below the claim of the manufacturer, are published in the "DANGER" and "CAUTION" list. We insist that the maker of fertilizer make good his guarantee to customers.

The inclination of the manufacturers is to comply with the law and to harmonize with the rulings of the State Board of Agriculture.

Before buying fertilizer, purchasers should consult Official Bulletins and Annual Report.

Respectfully,

A handwritten signature in cursive script, reading "A. P. Faudles". The signature is written in dark ink and is positioned centrally below the text "Respectfully,".

Secretary.

ITEMS OF INTEREST.

FERTILIZER INSPECTION AND ANALYSIS.

Ohio expends annually \$4,000,000 or more in the purchase of commercial fertilizers. Most of this is well spent, but it can be better spent in a more careful selection of goods, by adapting the fertilizer to the needs of the crops and the soil upon which it is grown, and by buying on basis of plant food only, rather than by seeking goods that sell for a low price per ton.

The present Fertilizer Law was passed in the interest of the farmer.

All goods sold in Ohio during 1912 conformed to this law:

The main requirement is in stating Sources of Ammonia. If muck, peat, pulverized leather, hair, ground horn, wool waste or other materials in which the ammonia is largely unavailable, is used, it must be stated on sack or tag affixed thereto.

The demand for good fertilizer increases.

Much of the tillable soil in Ohio is in need of some fertilizing elements.

Farmers should give this subject attention and inquire of the Experiment Station, Wooster, or farmers' institute lecturers concerning same.

Analysis of the different brands of fertilizers found by Inspectors on the open market are published from time to time in the Official Bulletin.

Users of fertilizers not required to wait till the end of the year before learning Chemist's findings.

The publicity given in the Official Bulletin to brands of fertilizers falling below guarantee has been conducive of good results:

In 1907, upon first analysis, 191 brands were found to be below the guarantee.

In 1911, out of 695 brands analyzed only 23 were below the guarantee.

At that time law permitted lee-way of 6.00% in total money value before evidence of fraudulent intent was presumed.

This was all changed when our present law became effective, December 1st, 1911, requiring all companies to give one hundred cents on the dollar, so all brands listed in the 1912 Report are expected to conform thereto.

Inspectors visit every section of the state in order to secure samples of fertilizers exposed for sale.

In 1908, 565 brands were licensed.

In 1909, 666 brands were licensed.

In 1910, 698 brands were licensed.

In 1911, 756 brands were licensed.

In 1912, 785 brands were licensed.

License fee \$30 per brand.

Chemist at Ohio State University, recommended by President W, O. Thompson, makes official analyses.

Farmers should make sure that fertilizer companies are licensed and legal in Ohio before purchasing.

They should buy with the understanding that the analysis of the state chemist shows good up to guarantee.

Farmers, but not dealers or agents, can have brands of fertilizer sent to the Department of Agriculture and analysis made upon payment of \$1.00 for each element for which analysis is asked; ammonia and potash one each; phosphoric acid two.

Before sending sample, a letter should be written to the Department asking for instructions as to how to draw sample.

All licensed brands will appear in Official Bulletin.

SOURCES OF AMMONIA.

AVAILABLE SOURCES OF AMMONIA.

Our present Fertilizer law calls for Sources of Ammonia. Materials used are classed as ANIMAL, MINERAL AND VEGETABLE.

ANIMAL: Animal Tankage, Dried Blood, Fish Scrap, Bone Meal, etc.

MINERAL: Sulphate of Ammonia, Nitrate of Soda, Cyanamid, etc.

VEGETABLE: Cotton Seed Meal, Castor Pomace, Garbage Tankage, Oil Seed Meals, Tobacco Stems or Dust, etc.

UNAVAILABLE SOURCES OF AMMONIA.

The manufacturer who uses muck, peat, pulverized leather, hair, ground horn or wool waste or other similar materials in which the ammonia is largely unavailable may expect his sales to decrease among those farmers who learn to make use of the information furnished in the Official Bulletins.

ADVANCE REPORT.

No advance Report of Analysis on the different brands licensed will be given out. The findings published in the Bulletins from time to

time are sufficient for all parties concerned. In case where Chemist's findings show any one ingredient $\frac{1}{4}$ of 1% less than Manufacturer's claims, sample is re-tested and results not published until receipt of report on second analysis. This eliminates possibility for error.

FERTILIZER USED—A COMPARISON.

Some States require no official record of tonnage, only registering the brand for taxation and inspection.

Below we give tonnage of fertilizers used in Ohio and Indiana since 1905. As a contrast we show tonnage reported by both Georgia and South Carolina.

	Ohio.	Indiana.
1905.....	115,308 tons	86,771 tons
1906.....	121,354 "	98,571 "
1907.....	118,021 "	100,791 "
1908.....	116,259 "	102,309 "
1909.....	146,384 "	134,064 "
1910.....	174,508 "	151,856 "
1911.....	160,925 "	179,533 "
1912.....	-----	143,678 "
	Georgia	South Carolina
1904-5.....	622,414 tons	481,637 tons
1905-6.....	743,424 "	662,688 "
1906-7.....	728,361 "	631,032 "
1907-8.....	766,166 "	680,791 "
1908-9.....	807,832 "	753,363 "
1909-10.....	1,030,699 "	975,039 "
1910-11.....	1,202,722 "	1,048,806 "
1911-12.....	1,225,100 "	886,223 "

FERTILIZER FOR SOIL DEFICIENCY, OR CROP REQUIREMENTS.

When purchasing fertilizers do you buy goods containing those elements which the soil lacks, or is deficient in, viz.: Nitrogen, Phosphorus, Potassium; or do you buy those elements in a fertilizer that the crop to be raised is in need of?

You are aware that Ohio farmers spend millions of dollars every year for fertilizers. The use of fertilizers intelligently give good returns on time, money and labor invested. Some apparently get little or no return for their efforts; WHY?

WHAT ARE THE INDICATIONS OF THE NEEDS OF FERTILIZERS?

The constantly decreasing yields of the principal crops grown in the State, together with the poor quality of grain. When the crop is yellow and will not grow it lacks nitrogen; when the ears of corn and the heads

of wheat fail to fill with plump, ripe kernels it lacks Phosphoric Acid Potash is needed for the starch and sugar in the plant. It also gives stamina to the straw.

WHAT "PER CENT" MEANS IN BUYING FERTILIZERS.

"Per cent" is simply an abbreviation for percentum or per hundred. Acid Phosphate of 16 per cent simply means that the article has sixteen pounds of phosphoric acid in each 100 pounds, the rest being made up of various earthly matters found in the rock from which the phosphate is made. By knowing the amount of each elementary material in 100 pounds it is easy to arrive at the percentage that each would bear to a ton, or 2,000 pounds. A 2-8-2 goods for instance, would have twelve pounds of plant food to each 100 pounds, or 240 pounds of plant food to the ton. It is well to remember this when purchasing fertilizers.

HOW CAN YOU PROTECT YOURSELF IN THE PURCHASE OF FERTILIZERS?

By paying strict attention to the result of analyses published in the Official Bulletin issued by the Department of Agriculture. These are published periodically and contain reliable information, and should be in the possession of every buyer of commercial fertilizers. If interested in the use of fertilizers make written request of the Department at Columbus that your name may be placed on the mailing list for future publications.

THE EFFECT OF FERTILIZERS ON CROPS.

Fertilizers should be in good mechanical condition. They should be uniformly mixed, finely ground, dry and drillable. Not all of the fertilizer is used up by the crop to which it is applied. If the fertilizer is applied systematically, it adds fertility to the natural store of the soil and shows its effect in succeeding crops.

WHY IS THE USE OF FERTILIZERS IN OHIO A GOOD INVESTMENT?

Because it is more intelligently used than ever before; because many farmers now buy solely on basis of plant food only, rather than by name of BRAND or PRICE per ton; because we have now for the first time a good fertilizer law passed in your interest.

Give us the benefit of your experience and write us your method of buying fertilizers.

AGRICULTURAL LIME.

The Experiment Station recommends the purchase of those limes containing calcium; this constituent being useful in neutralizing soil acidity.

LICENSES.

Commercial Fertilizers must be licensed before sold or offered for sale in Ohio. All licenses expire with the calendar year, December 31st; hence any commercial fertilizer found on the market at any time during the year will require license.

FEE \$30.

This amount cannot be prorated under the provisions of the fertilizer law. If manufacturer license goods, agents and dealers are relieved from license liability. Communicate with the Department at Columbus and ascertain facts to avoid liability.

EARLY HISTORY.

Ohio's first Fertilizer law passed March 16, 1881. The first Fertilizer Plant established in the State was in 1874. In that year three Companies were incorporated, one of which is still in existence, the Cleveland Dryer Company of Cleveland, now part of the American Agricultural Chemical Co.

COMMENT.

During the year The Bash Fertilizer Co., of Fort Wayne, Ind., changed its name to The Bash Fertilizer & Chemical Co.

The Buffalo Fertilizer Company, of Buffalo, N. Y., now known as The International Agricultural Corporation, Buffalo Fertilizer Works.

SUMMARY OF CHEMIST'S FINDINGS.

Chemist's findings on brands published in this Report exceed Manufacturers' CLAIMS. On a money basis this would be equivalent to eight per cent. It is therefore apparent that the Fertilizer Companies are endeavoring to give purchasers one hundred cents or more in value for each dollar paid them, which the new law requires. The old law permitted a margin of six per cent. in total money value, which was charged against the buyer.

PAGES OF REPORT DATED 1912.

All analyses pages of his Report dated 1912. In the event any are clipped therefrom, you can readily ascertain the year by referring to the date on that particular page.

NOTICE TO CONSUMERS.

Do not purchase any brand of fertilizer from any Manufacturer, Firm, Agent or Dealer unless you know positively that such brands have been legally licensed, in accordance with the laws of the State of Ohio.

ANALYSES FOR CONSUMER.

Farmers, not dealers or agents, can have brands of fertilizer sent to the Department of Agriculture and analysis made upon payment of \$1.00 for each element for which analysis is asked; ammonia and potash one each; phosphoric acid two.

Care must be taken in selecting sample, in order that it may represent fairly and impartially the goods desired to be analyzed.

A sample for such analysis shall be taken by the purchaser in the presence of two disinterested witnesses, at the time and place of delivery to purchaser from sacks not theretofore opened, broken or re-sacked, from at least ten per cent. of the sacks or other packages comprising the whole lot purchased. If there be less than one hundred sacks in the lot purchased, samples must be taken from not less than ten sacks; and if there are less than ten sacks in the lot purchased, samples shall be taken from each sack. Draw a small portion from different places in each sack,—top, sides and bottom, mix thoroughly and place two pounds into two cans or jars, marked to identify it and to show by whom sent, securely sealed and labeled; and forward to Secretary of the State Board of Agriculture, Columbus, Ohio, together with printed certificate from one of the bags or packages so sampled, express charges prepaid, accompanied by a fee of \$1.00 for each element for which analysis is asked, as required by law. Sender should plainly mark his name and address on package, also name of manufacturer.

CLAIMS AND ANALYSES.

Chemist's findings together with Manufacturers' claims of brands found on the market in this Report side by side. We also print Manufacturers' claims for those brands licensed but not found by Inspectors.

This department analyzes goods found by Inspectors on the open market, in the hands of consumer, agent or in transit, and publishes results of Chemist findings. As to the quality of the licensed goods offered for sale purchaser must decide for himself. Samples not taken from goods stored at some particular point, but from all sections of the state.

SUMMARY OF THE LAW.

EVERY PACKAGE must have printed in a conspicuous place on the outside thereof the number of net pounds, name, brand or trade mark under which it is sold, with name and address of manufacturer.

ALSO THE MINIMUM percentages guaranteed of ammonia, of potash soluble in water, of phosphoric acid available and phosphoric acid insoluble.

WHERE THE SOURCE OF ANY OR ALL OF THE AMMONIA is derived from muck, peat, pulverized leather, hair, ground horn-wool waste or similar materials in which the ammonia is largely unavailable, such material must be specifically printed on packages, bags or tags attached thereto. If from other sources more highly available either name them or state whether from animal, mineral or vegetable.

STATE SOURCE OF INSOLUBLE PHOSPHORIC ACID IF CLAIMED; whether from animal or mineral, or mixture of both.

USE OF FALSE OR MISLEADING NAME, BRAND OR TRADE MARK, in designating any commercial fertilizer is prohibited.

GOODS MUST ANALYZE up to Manufacturer's claims.

Amended Sec. 1142. No commercial fertilizer shall be sold or offered for sale if the percentage of any ingredient, element or constituent is less than the minimum percentage claimed or guaranteed; provided that there may be a deficiency of six per cent. of the amount claimed in any one ingredient before evidence of fraudulent intent shall be presumed; if there is a corresponding excess in the other ingredients claimed on the basis of the following equivalents in value: One part of ammonia shall be deemed equivalent to three parts of available phosphoric acid; one part of ammonia shall be deemed equivalent to three parts of potash; one part of ammonia shall be deemed equivalent to six parts of insoluble phosphoric acid from animal matter; one part of ammonia shall be deemed equivalent to twelve parts of insoluble phosphoric acid from mixed animal and mineral matter; in bone or tankage one part of ammonia shall be deemed equivalent to five parts of total phosphoric acid.

PENALTIES.

Violation of any of the provisions of the Commercial Fertilizer Law is punishable on conviction by a fine for the first offense; for a second or subsequent offense not less than \$200 nor more than \$500, or imprisonment not more than six months, or both.

Agents and dealers should have written contracts with Manufacturers not located in Ohio that they will be responsible for all penalties and fines imposed.

ENFORCEMENT OF THE LAW.

The attorney general, or any prosecuting attorney, shall prosecute all violations of the fertilizer law.

TWELVE IMPORTANT FACTS A FARMER SHOULD KNOW WHEN PURCHASING FERTILIZERS.

BY HENRY G. BELL.

Agronomist of the Middle West Soil Improvement Committee.

Modern farming is an industry based upon science. By applying scientific methods of investigation, the specialist and the farmer have been able to learn something about the supply and nature of plant food, and its availability for crop use during the growing season. They have also been able to learn much about the soil as to how it is influenced by drainage, tillage, cropping and the application of plant foods in different forms. All these influences have a very important bearing upon the productiveness of the soil. They all enter into the question of the profitableness with which plant food can be applied to the soil. With these general principles in mind, the following twelve points concerning fertilizers, which the farmer should have in mind when purchasing this form of plant food, are herewith submitted.

1. WHAT FERTILIZERS ARE.

Fertilizers are natural PLANT FOODS, prepared according to definite formulas, under laboratory control.

2. INDICATION OF THE NEED OF FERTILIZERS.

- (a) Low and decreasing yields.
- (b) Spindly growth of stalk.
- (c) Inferiority of product—for instance.
 - (1) Small, pale, insipid fruit.
 - (2) Poorly filled kernels of wheat.
 - (3) Large ears of unsound corn.

3. SOIL CONDITIONS ESSENTIAL TO BEST RETURNS FROM FERTILIZERS, AND HOW TO OBTAIN THEM.

- (a) The soil must be free from standing water.
This is accomplished by a good drainage system.
- (b) The soil should be supplied with an abundance of organic matter in order to give it proper body and moisture holding capacity.

This is accomplished by

- (1) Rotation of crops, wherein legume crops are grown periodically.
- (2) Plowing under green manure.
- (3) Applying strawy barn manure.

(c) The soil should be sweet in reaction. This reaction is gotten by good drainage and periodical applications of lime.

4. NATURE OF FARM SOILS.

The number and kind of crops taken from the land and the amount of manure applied to it, as well as the nature of the soil, should be taken into consideration.

NATURE OF SOILS.

Kind of soil.	Nitrogen.	Phosphoric Acid.	Potash.
Black Humus.....	Fairly abundant ...	Scarce.....	Scarce.
Sandy.....	Scarce.....	Scarce.....	Scarce.
Clay.....	Present in varying quantities.....	Present but largely in unavailable form	Present but largely in unavailable form

5. NATURE AND REQUIREMENT OF FARM CROPS.

The valuable parts of the various farm crops differ.

For instance.

The cereals are grown for their grain.

Hay crops are grown for their stalk production.

Potatoes and other root crops are grown for their root production.

The plant food ingredients, therefore, used by these various crops, speaking generally, are as follows:

	Nitrogen.	Phosphoric Acid.	Potash.
Cereals.....	Fair.....	Much.....	Fair.
Grass.....	Much.....	Small.....	Much.
Roots.....	Much.....	Much.....	Much.

6. THE DUTIES OF PLANT FOOD INGREDIENTS.

The duties of the important plant food ingredients are as follows:

NITROGEN—This element influences the rate and amount of stalk or vegetable growth of the plant.

PHOSPHORIC ACID—This ingredient has to do with the prolificacy of the plant, and more especially with the time of maturity of the crop. An abundant supply of available phosphoric acid hastens the ripening of any crop.

POTASH—This ingredient influences the growth of the stalk. It has a direct bearing also upon the laying down of starch in the filling of the kernels, or growth of the tuber or root.

7. BEST CONDITIONS OF FERTILIZERS.

For best results, fertilizers should be in good mechanical condition. They should be uniformly mixed, finely ground, dry and drillable.

8. RELIABILITY.

In buying fertilizers, the farmer should see that his purchases are made through a reliable agent.

9. PROTECTION FOR THE FARMER.

The farmer should pay close attention to the results of the inspection and analysis made by state officials. These are issued periodically under the state law, and contain reliable information.

10. THE EFFECT OF FERTILIZERS ON CROPS.

The judicious use of suitable fertilizers not only profitably increases the yield but improves the quality as well. When used in seeding clover, fertilizers nearly always insure a catch.

Not all of the fertilizer is used up by the crop to which it is applied. If the fertilizer is applied systematically, it adds fertility to the natural store of the soil, and shows its effect in succeeding crops.

11. THE QUANTITY TO USE.

This question depends upon the character of the soil and the previous cropping of it, as well as upon the demands which the farmer makes of the field. The question resolves itself into a business proposition. The yield and quality of the resulting crops must guide the farmer as to the amount he can profitably use upon his fields.

12. PROFIT FROM JUDICIOUS USE OF FERTILIZERS.

The Ohio Experiment Station, after 10 years experiments of fertilizers on a rotation of corn, oats, wheat and hay (Circular No. 120) find the liberal application of suitable, complete fertilizers at an average cost for fertilizers of \$19.78 per acre, per rotation, gave an average gross return of \$32.84 per acre per rotation, or an average net profit of \$13.06 per acre per rotation.

IMPORTANT QUESTIONS AND ANSWERS RELATIVE TO THE USE OF MANURES AND FERTILIZERS.

BY CHAS. E. THORNE,

Director Ohio Experiment Station.

1. WHAT IS THE AVERAGE COMPOSITION OF A TON OF MANURE?

Ans. Approximate average composition of manures.

	Pounds per ton.		
	Nitrogen.	Phos. Acid.	Potash.
*Horse manure.....	9—10	4—7	10—18
Cow manure.....	10	5—7	7—10
†Steer manure (fattening).....	12—18	6—7	7—8
Sheep manure.....	30	5	20

2. IS MANURE A WELL-BALANCED FERTILIZER; IF NOT, WHY NOT?

Ans. No, because when produced by growing or milk producing animals a part of the phosphorus of the food stuffs will be stored in the bones and nerve tissues of the animal or carried away in the milk, thus leaving the manure naturally deficient in this element.

3. WHAT ARE THE LOSSES OF MANURE IN THE STABLE?

Ans. If the stable floor is of plank or earth, most, or all, of the liquid will be lost, and this part may contain more than half the total value of the manure. If the manure is allowed to heat in the stable it will lose ammonia to the extent of practically all that contained, and the ammonia constitutes about two-thirds the total value of manure. The Ohio experiments have shown that the loss in manures from steers fed on an earth floor, when there was no heating, may amount to one per cent. per month. (See Bulletin 183, p. 203.)

*Roberts' "The Fertility of the Land."

†Ohio Experiment Station Bulletin 184, p. 302. See also Ohio Experiment Station Bulletin 134, p. 93.

4. WHAT ARE THE LOSSES OF MANURE IN THE BARNYARD?

Ans. In three months untreated manure exposed in an open barnyard suffered the following losses:

Total organic matter.....	38 per cent.
Total ash.....	17 " "
Total phosphorus.....	23 " "
Water soluble phosphorus.....	29 " "
Total potassium.....	57 " "
Water soluble potassium.....	59 " "
Total nitrogen.....	27 " "
Water soluble nitrogen.....	67 " "

(See Bulletin 183, p. 205.)

Field experiments, continued for 14 years, show that such exposure has caused a loss of at least 30 per cent. in the crop-producing value of the manure. (See Ohio Experiment Station Circular 92, p. 28.)

5. WHAT ARE THE LOSSES OF MANURE IN THE FIELD?

Ans. If manure is left in piles in the field the organic matter, with its nitrogen, will gradually be converted into gas and escape into the air. As soon as manure is piled this operation begins, and it goes on whenever the temperature within the heap is above the freezing point. In addition to this loss, the fertilizing constituents of such heaps are washed into the soil below with every rain. If manure be at once spread upon the field it will lose only the ammonia that may have already collected in the interstices of the moist manure. As soon as it becomes dry this loss ceases, and the rains which follow will wash the soluble fertilizing constituents directly into the soil where they are needed. There may be occasional losses by the manure being washed bodily down steep hillsides in heavy rains or melting snows, but the losses from this source under existing Ohio practice are insignificant as compared with those which take place in the stable and barnyard.

6. WHAT IS THE QUANTITY OF MANURE PER ANIMAL?

Ans. The daily production of manure is approximately as follows per 1,000 pounds live weight.

Horses.....	50 to 60 pounds.
Cows.....	60 to 70 pounds.
Fattening steers.....	40 to 50 pounds.
Fattening lambs.....	33 pounds.

These estimates include bedding at the rate of about 7 pounds of straw per 1,000 pound animal per day. (Roberts' Fertility of the Land, and Ohio Exp. Sta. Bulletin 183 and 184.)

7. WHAT IS THE DIFFERENCE BETWEEN "AMMONIA" AND NITROGEN?

Ans. Ammonia is a chemical compound made up of 14 parts by weight of nitrogen and 3 parts of hydrogen, or about 82 per cent. nitrogen and 18 per cent. hydrogen.

8. WHAT IS THE DIFFERENCE BETWEEN "PHOSPHORIC ACID" AND PHOSPHORUS?

Ans. Phosphoric acid, as the term is used in fertilizer terminology, is a compound containing 62 parts by weight of phosphorus combined with 80 parts of oxygen, or about 44 per cent. phosphorus and 56 per cent. oxygen.

9. WHAT IS THE DIFFERENCE BETWEEN "POTASH" AND POTASSIUM?

Ans. Potash is a combination of the elements potassium and oxygen, containing 78 parts by weight of the former and 16 of the latter, or about 83 per cent. potassium and 17 per cent. oxygen.

10. WHAT IS THE DIFFERENCE BETWEEN LIME AND CALCIUM?

Ans. Lime is a combination of calcium and oxygen, containing 40 parts by weight of the former and 16 parts of the latter, or about $71\frac{1}{2}$ per cent. calcium and $28\frac{1}{2}$ per cent. oxygen.

11. WHAT IS THE DIFFERENCE BETWEEN QUICKLIME AND HYDRATED LIME?

Ans. Quicklime is freshly burnt lime, and if pure, would have the above composition.

When quicklime is exposed to moisture the lime absorbs about 32 per cent. of its weight of water, the two uniting with great energy and the evolution of heat, and if just the proper quantity of water is used a fine, dry powder results which is known as hydrated lime. The percentage composition of hydrated lime is approximately 54 per cent. calcium, 43 per cent. oxygen and 3 per cent. hydrogen.

12. WHAT IS THE DIFFERENCE BETWEEN QUICKLIME AND CARBONATE OF LIME?

Ans. If quicklime be exposed for a long time to the air it not only combines with the water but also with carbon dioxide (carbonic acid), becoming carbonate of lime, which is the condition in which it is found in nature as limestone. The percentage composition of pure carbonate

of lime is 56 per cent. lime and 44 per cent. carbon dioxide, or 40 per cent. calcium, 12 per cent. carbon and 48 per cent. oxygen. The number of pounds of calcium in a ton of each of these three carriers is, therefore as follows:

In one ton of quicklime.....	1,430
In one ton of hydrated lime.....	1,080
In one ton of carbonate of lime.....	800

13. WHAT IS THE MEANING OF "NITRATE?"

Ans. A nitrate is a salt formed by the combination of nitric acid with a basic element, such as sodium or potassium, giving nitrate of soda or sodium nitrate, nitrate of potash or potassium nitrate, etc.

14. WHAT IS THE MEANING OF "PHOSPHATE?"

Ans. A phosphate is a similar combination of phosphoric acid with a base, such as phosphate of lime.

15. WHAT IS THE MEANING OF "ACID PHOSPHATE?"

Ans. Acid phosphate is the term used to designate the substance formed by treating the phosphatic rock, found in Tennessee and other southern states, with sulphuric acid, in order to make the phosphorus of this rock (which is phosphate of lime) available to plants, it being insoluble in water in its natural condition. In this treatment approximately equal weight of the ground rock and sulphuric acid are mixed together. Chemical union takes place and the product is acid phosphate.

16. WHAT IS THE MEANING OF "SUPERPHOSPHATE?"

Ans. Superphosphate is the term originally used in England to designate the composition now known as acid phosphate.

17. WHAT IS THE MEANING OF "SULPHATE?"

Ans. A sulphate is the combination of sulphuric acid with a base such as sodium, calcium or potassium, giving the sulphates of soda lime and potash.

18. WHAT IS THE MEANING OF "MURIATE?"

Ans. The acid now known as hydrochloric (because it is a compound of hydrogen and chlorine and contains no oxygen as do sulphuric and phosphorus acids) was originally called muriatic acid, and a muriate

is the combination of this acid with a base. The muriate of potash is the principal example of this name. Common salt might be called muriate of soda. In the union of hydrochloric acid with these bases the hydrogen is liberated so that the resulting salt contains only two elements, potassium or sodium combined with chlorine. As the term potash is properly applied only to the combination of potassium with oxygen, and as muriate of potash contains no oxygen, the name is a misnomer. The proper name is potassium chloride for the potassium compound and sodium chloride for common salt.

19. WHAT ARE THE USUAL CONSTITUENTS OF FERTILIZERS?

Ans. The basal constituent of ordinary fertilizers is a carrier of phosphorus, either the phosphate of lime found as a rock in South Carolina, Florida and Tennessee, or the bones and other wastes of slaughter-houses. To this base materials are added carrying nitrogen or potassium, one or both. The usual carrier of nitrogen is slaughter-house waste, though peat is used in some low-grade fertilizers. Practically the only carriers of potassium in use for this purpose are the muriate or sulphate of potash or a crude salt called kainit, the world's supply for both of which is drawn from mines at Strassfurt, Germany.

20. WHAT IS THE FUNCTION OF "FILLER" IN FERTILIZERS?

Ans. There is no place in a properly made fertilizer for any "filler." Acid phosphate and bone meal are dry powders, ready for use alone or for mixing with other materials. Muriate of potash resembles common salt in its appearance and texture, and may be used alone or in mixtures, just as salt might be. Tankage, which is the ordinary carrier of nitrogen, used in fertilizers, is made by rendering the waste scraps of meat and tendon of the slaughter-houses to extract the fat and drying and grinding the residue. It is made in various grades and is sold on the basis of the "ammonia" and "bone phosphate" contained. A common grade is called "6 and 35," meaning 6 per cent. "ammonia" and 35 per cent. "bone phosphate." As bone phosphate is about 46 per cent. phosphoric acid and 54 per cent. lime, this grade would carry about 16 per cent. phosphoric acid. Let us now compound a 1-8-1 fertilizer or a fertilizer carrying in each ton 1 per cent., or 20 pounds of "ammonia," 8 per cent., or 160 pounds of "phosphoric acid," and 1 per cent., or 20 pounds of "potash." The composition of such a fertilizer is shown below.

	Ammonia. Lbs.	Phos. Acid. Lbs.	Potash. Lbs.
Constituents in 1 ton.....	20	160	20
Material required:			
350 pounds, 6 and 35 tankage.....	21	46	--
820 pounds, 14% acid phosphate.....	--	114	--
40 pounds, muriate of potash.....	--	--	20
1,210 pounds total.....	21	160	20

Twelve hundred and ten pounds of these mixed materials would, therefore, contain sufficient of the essential constituents to make a ton of fertilizer of the required analysis, and in order to make the farmer think he is getting his money's worth the total weight is made up by adding any refuse that may be convenient. This may be accomplished by using a low grade of phosphate rock for the acid phosphate or by "filling" with ground limestone or with peat. All these methods are practiced. For example, a dried peat may contain 3 per cent. "ammonia" and 1-3 of 1 per cent. "phosphoric acid." Such a "filler" may be used as below:

	Ammonia. Lbs.	Phos. Acid. Lbs.	Potash. Lbs.
810 pounds peat.....	24	2	--
1,150 pounds acid phosphate.....	--	161	--
40 pounds muriate of potash.....	--	--	20
<hr/> 2,000 pounds total.....	<hr/> 24	<hr/> 163	<hr/> 20

If the dry peat cost \$2 per ton, the acid phosphate \$16 and the muriate of potash \$46, the cost of the materials required to make a ton of the above compound would be \$10.93.

Ohio peat is being used in large quantities for mixing fertilizers.

21. HOW TO TELL WHEN LIME IS NEEDED.

The first indication of lime hunger in the soil is the behavior of the clover crop. The seed sown in the spring takes root and apparently a perfect stand is obtained. At harvest the land is fairly evenly covered with young clover, but there are patches of greater or less extent, in which the plant seems unthrifty. As the season progresses these patches increase in size and the contrast becomes more apparent. By the following spring these patches are bare of clover, and weeds of various kinds, especially horse sorrel, have taken its place.

The unthriftiness of the clover usually makes its first appearance on the higher and drier lands, and especially on those which have been long in cultivation with scanty manuring. It is also more apparent in dry seasons; in fact, in a season of abundant rainfall throughout the summer it may not be observed, but the general tendency is toward an increasing difficulty in securing satisfactory crops of clover.

It should not be confused with complete destruction of the young plants by late spring frosts, nor with a disease of clover which causes a wilting and browning of the leaves and the appearance of black spots on the stems.

When these conditions are observed on an acid soil, as indicated by the litmus test, it may safely be assumed that lime is needed.

22. NAME THE CROPS MOST BENEFITED BY LIME, AND WHY?

Ans. Clover first, and corn next, because a crop of clover contains from four to ten times as much lime as either of the cereal crops, and a crop of corn nearly three times as much as one of wheat, and because an alkaline base is essential to the existence of the soil organisms through whose agency nitrogen is fixed in a form available to higher plants. In the case of clover these organisms operate on the free nitrogen of the air in the upper layer of soil and form the nodules on the clover roots, and in the case of corn similar organism convert the nitrogen of the dead roots and other organic matter of the soil into available form. Lime is both the cheapest and most efficient base for this purpose.

23. NAME THE REASON WHY PHOSPHORUS IS USUALLY THE FIRST ELEMENT NEEDED?

In the maturing of the crop about three-fourths of the total phosphorus of the plant is transferred to the grain, while a like portion of the potassium is retained in the stem and leaves. Whether the grain be sold or fed on the farm the result is that most of the phosphorus is carried away, either in the grain itself or in the bones and nerve tissues of the animal fed on it, or in milk. The potassium, however, remains either in the unused straw and stalks or in the manure, since comparatively little of this element is retained in the animal body.

24. NAME CONDITIONS UNDER WHICH POTASSIUM IS LIKELY TO BE NEEDED.

When straw and hay as well as grain are sold off the farm the time will come when potassium, as well as phosphorus, must be restored

25. NAME CONDITIONS UNDER WHICH NITROGEN IS LIKELY TO BE NEEDED.

Nitrogen, like phosphorus, is stored chiefly in the grain, and unless the system of agriculture be such as to restore this element by the frequent growing of leguminous crops and also by the return to the soil of some manure, the time will come when nitrogen also must be purchased. The Ohio Station's experiments indicate that the growing of clover every third year will not maintain the nitrogen supply if the hay crop be removed from the land. (Circular 79, p. 16.)

FERTILIZING PROBLEMS.

BY ALFRED VIVIAN.

Agricultural College, Ohio State University. Columbus, Ohio.

Real progress in the use of commercial fertilizers will never be made until our farmers come to realize that each farm is a problem of its own. The fertilizing scheme which is ideal for one farm may be the most irrational for another. So many factors enter into the question of what fertilizers are best to use, that, before a rational system of fertilization can be recommended for any particular farm, a detailed study of that farm must be made with a complete knowledge of its previous history. It is not enough, even, to know the location of the farm, the style of farming, and the type of soil, but, if advice is to be well founded, as much as possible must be known of the manner in which that soil has been handled. Soils sometimes are like patient people, whose faces do not show the internal suffering that they have borne because of the abuses heaped upon them by their selfish and thoughtless associates. In like manner a soil of good type does not always unfold to the superficial observer the history of its past abuses and neglect. The normal inherent properties of the different types of soil are coming to be pretty well understood, but the extent to which the soil has deteriorated through abuse is not so easily ascertained. It follows, therefore, that the only sound method of determining what fertilizer should be used on a certain farm is to ascertain the same by carefully conducted plot tests.

Many farmers hesitate to undertake these experimental tests because of fancied difficulties, hence the demands made on the colleges and Experimental Stations for specific advice as to the best fertilizer for use on a particular crop.

That the Experiment Station bulletins repeatedly show that there is no "best" fertilizer for wheat, for instance, which is adapted to all soils, in no way decreases the demand for such a formula. The old notion was that each crop required a special fertilizer with the chemical elements in a proportion especially favorable to that crop. The modern idea is that the soil, and not the crop, is the important factor, and that the needed variation of fertilization for different crops is not so great as the differences in fertilization made necessary by variation in the types of soils. The first question to be asked then is on what kind of soil is the fertilizer to be used, and after that for what crops.

SOIL CHARACTERISTICS.

CLAY SOILS are as a rule especially well stocked with potash, although it may be present in a very unavailable form. They have a reasonable amount of phosphoric acid and may or may not be rich in nitrogen.

SANDY SOILS are usually deficient in all elements of fertility, but especially so in potash.

MUCK OR PEAT SOILS are high in nitrogen, rather high in phosphoric acid, but very low in potash.

LIMESTONE SOILS when in virgin condition are proverbially rich soils, but are so generally abused that nearly all of them in Ohio are crying out for all the elements of plant food.

The one important fact that should be recognized by all farmers is that there is no soil in the State of Ohio which contains sufficient phosphorus for the maximum crop. The one safe proposition is that whatever may be said of nitrogen and potassium, in a particular soil, no mistake can be made in applying some carrier of phosphorus, for all of the soils of the state are deficient in this element.

FERTILIZERS FOR SPECIAL CROPS.

It follows from what has been said above that any recommendations of formulas for special crops must be regarded as tentative only, and should be varied to suit the soil to which they are applied. A soil especially rich in nitrogen, for instance, will permit of a decrease in the percentage of that element in the fertilizer. The suggested formulas are intended for use where the main dependence for the crop is placed on commercial fertilizers, and for a soil of rather low fertility.

CORN.

Corn is the crop which probably gives best returns for stable manure, and on most farms the manure is used on this crop. If the ground plowed for corn has had a liberal application of manure, or if it has a good clover sod, probably a carrier of phosphoric acid like acid phosphate, or bone meal, will be all that is necessary, say 100 to 150 pounds of acid phosphate to the acre. In case the coating of manure was scanty, or the sod poor, some potash also should be used.

WHEAT.

Wheat responds to rather liberal fertilization. A mixture analyzing 4-10-4 will meet average conditions. Most farmers use too little fertil-

izer on wheat, for it gives a more profitable return for large applications. Four hundred pounds to the acre give excellent returns at the Ohio Experiment Station.

OATS.

Oats gives less decided returns for nitrogen than does wheat. The nitrogen of the mixture recommended for wheat could be decreased, or if the oats followed corn which had been well manured perhaps a mixture analyzing 0-10-4 would be most profitable.

POTATOES.

Potatoes are generally supposed to require an extra supply of potash. A mixture carrying 3 to 4 per cent. of ammonia, 10 per cent. of phosphoric acid, and 6 to 8 per cent. of potash, is about right for average conditions. Here again it will pay to fertilize heavily—500 to 1,000 pounds to the acre is not uncommonly used by the extensive potato growers. Some of the potato growers of Long Island use a ton or more to the acre.

TOBACCO.

Tobacco is a gross feeder and should be fertilized heavily for best results. The combination which gives the greatest profit at the German-town Sub-Station is about 1,000 pounds of a 4-10-9 mixture.

SUGAR BEETS.

Sugar Beets are grown most extensively in this state on the black lands which are naturally low in potash. The same mixture as that recommended for tobacco would probably be best for beets on such land. The nitrogen should be in very available form, preferably as nitrate of soda. If grown on clay loam soils the 4-10-6 mixture would undoubtedly be satisfactory.

MARKET GARDEN CROPS.

Market Garden Crops are seldom fertilized as heavily as they should be. Stable manure should be used abundantly and this should be reinforced with a liberal amount of an 0-10-8 mixture. The extra nitrogen for such early crops as lettuce, spinach, asparagus and early cabbage and cauliflower, is best supplied in nitrate of soda, added in applications of 150 pounds to the acre every two or three weeks during the Spring. A total of 1,000 pounds of fertilizer to the acre is considered a moderate

application by eastern truckers. If a complete fertilizer is desired for these crops the one recommended for tobacco would be about right.

CELERY AND ONIONS.

Celery and Onions are largely grown on the black muck soils of the State and a fertilizer for them should be high in potash. The basic formula for tobacco meets the situation pretty well—even more potash would do no harm. Frequent applications of 100 pounds to the acre of nitrate of soda during the growing season is said to work wonders with both of these crops. It pays to use fertilizers liberally on both.

STRAWBERRIES.

Strawberries should be liberally supplied with phosphoric acid and potash in addition to that in the manure used in preparing the ground. An application of 150 pounds of nitrate of soda to the acre when the berries are beginning to set is said materially to increase the size of the fruit.

THE HOME-MIXING OF FERTILIZERS.

BY CHAS. E. THORNE,

Director Ohio Experiment Station.

We use commercial fertilizers in order to feed our crops on three chemical elements and three only, namely: nitrogen, phosphorus and potassium. It is true that several other elements are equally essential to the growth of the plant, but these are furnished by the soil in sufficient quantity without our aid. It is also true that some soils must be limed before they will yield remunerative crops, and it is further true that lime is an essential plant food; but we apply lime chiefly as a soil corrective and not primarily as a plant food, as we do the three elements first mentioned. In other words, lime will be required as a soil corrective before it is needed as a plant food, and when we use it for the first mentioned purpose it will also serve the second.

FERTILIZING MATERIALS.

While there are numerous commercial materials that may be used in fertilizing the soil there are three or four which are so easily obtained and also so effective, that the Ohio farmer has at present no occasion to look for anything else. These are nitrate of soda, muriate of potash, acid phosphate and steamed bonemeal.

NITRATE OF SODA.

Nitrate of soda is a coarse, grayish salt, imported from Chile, South America, and hence is sometimes called Chile saltpeter. It should contain about $15\frac{1}{2}$ per cent nitrogen, and is the most effective carrier of nitrogen in use for fertilizing purposes. The usual cost, including freight, is about $2\frac{3}{4}$ to 3 cents per pound in small lots by the time it reaches the Ohio farmer, but when bought by the carload this cost may be much reduced. Like common salt it absorbs moisture from the atmosphere and becomes lumpy, so that it is necessary to sift it and break the lumps when preparing to use it. A common sand sieve, such as masons use, with quarter-inch meshes, will separate the lumps, which may be broken up with the back of a shovel or a wooden pestle and sifted again. The lumps constitute but a small proportion of the entire bulk.

MURIATE OF POTASH.

Muriate of potash is also a coarse salt, resembling nitrate of soda so closely that it requires considerable experience to distinguish them. The sacks, or bins, therefore, in which these materials are stored, should be kept carefully labelled. The world's supply of muriate of potash now comes almost wholly from mines near Stassfurt, Germany, from whence it is shipped to this country, usually in sealed sacks containing 224 pounds. It should analyze 50 per cent actual potash. Muriate of potash is the commercial name for this material, but its correct name is potassium chloride, since it is a combination of the elements potassium and chlorine (common salt is chemically sodium chloride).

Potash is a combination of the elements potassium and oxygen, containing about 83 per cent. of the former and 17 per cent. of the latter, and having the chemical symbol K_2O , which is sometimes found on the fertilizer sack.

ACID PHOSPHATE.

Acid phosphate is an American product, being derived from phosphate rocks found in South Carolina, Florida and Tennessee, which are quarried, dried and ground into a fine powder which is then mixed with approximately an equal weight of sulphuric acid, the object of this treatment being to convert the phosphorus of the rock into a soluble form. When thus treated an acid phosphate should contain from 14 to 18 per cent available "phosphoric acid" or 6 to 7 per cent phosphorus; phosphoric acid, like muriate of potash, being a trade name. As it is the nitrogen for which we buy nitrate of soda, and the potassium for which we buy muriate of potash, so it is the phosphorus for which we buy acid phosphate. The phosphoric acid of the fertilizer sack is $\frac{1}{2}$ a

compound consisting of about 44 per cent. phosphorus and 56 per cent oxygen, hence an acid phosphate analyzing 14 per cent. phosphoric acid would contain about 6 per cent. phosphorus, and 18 per cent. of phosphoric acid would be equivalent to nearly 8 per cent. phosphorus.

MISLEADING NAMES.

Acid phosphate is sometimes sold for just what it is, but more often it has some misleading name attached to it, as "Soluble Bone," "Dissolved Bone," "Wheat Special," "Dissolved Phosphate," etc., etc. Any material showing 10 to 18 per cent available phosphoric acid, and nothing else, may safely be assumed to be a plain acid phosphate. It has been supposed that the phosphate beds owe their origin to the bones of primeval animals, but the substance is now just as truly a rock as is common limestone, and the evident purpose of calling an acid phosphate a "dissolved bone" is to deceive those who have a prejudice against "rock goods."

SOURCE OF FERTILIZER PHOSPHATE.

Animal bone was the first discovered source of fertilizer phosphate, the effect of broken or pulverized bones on the growth of plants having been noticed at an early date. When chemists began to turn their attention to agricultural problems they found that the active principle of bones was phosphorus. When this discovery was made the next step was to make use of rocks containing phosphorus, but these were found to be practically inert in their natural condition. The discovery that rock phosphate could be made available by treatment with sulphuric acid was first put into practical effect by John Bennet Lawes of England, and his work opened the door to the great fertilizer industry of today.

BONE MEAL.

Raw bone meal has been a favorite fertilizing material, but a 7-year test by the Ohio Experiment Station, in which 200 pounds per acre each of raw and steamed bone meal have been used side by side in a rotation of corn, wheat and clover, has given the following results:

Form of bone meal.	Annual increase per acre.		
	Corn, bu.	Wheat, bu.	Hay, lbs.
Raw.....	7.64	13.19	1,309
Steamed.....	11.24	14.89	1,300

Other experiments have shown that this soil is especially responsive to phosphorus, and to this fact, as well as to the finer condition of the steamed meal, is apparently due the result attained. The station has made no direct comparisons between steamed bone meal and acid phosphate, but the general outcome of its work indicates that the pound of phosphorus is practically as effective in one of these materials as in the other. Whether to use the one or the other, therefore, depends upon the cost per pound of the phosphorus contained, after making allowance for the nitrogen carried in the bone meal.

EXCESSIVE USE OF ACID PHOSPHATE.

It is true that the excessive use of acid phosphate will tend to increase acidity on soils deficient in lime, but experience has shown that when the lime supply is so low that acid phosphate will produce this effect it is time to begin liming, and when this is the case the additional quantity of lime required to neutralize the effect of an ordinary use of acid phosphate is so small as to make this point a negligible matter.

THE COMPOUNDING OF A FERTILIZER.

Having these three or four materials at command, it is an extremely simple proposition in arithmetic to mix them together so as to produce any desired formula. Suppose, for example it is desired to compound a 1-8-1 fertilizer; that is, one containing 1 per cent. "ammonia," or 20 pounds per ton, 8 per cent. "phosphoric acid," or 160 pounds per ton, and 1 per cent. "potash," or 20 pounds per ton. Fertilizer "ammonia" is a compound of nitrogen and hydrogen containing about 82 per cent. nitrogen and 18 per cent. hydrogen. Nitrate of soda, as has been stated, is sold to contain $15\frac{1}{2}$ per cent nitrogen, which would be equivalent to practically 19 per cent. "ammonia." To furnish the 20 pounds of ammonia in our formula would therefore require 110 pounds of nitrate of soda. The standard grade of acid phosphate contains 14 per cent. available "phosphoric acid" or 14 pounds per hundred; it would therefore require as many hundred pounds of acid phosphate to furnish 160 pounds of phosphoric acid as 14 is contained in 160, which is a little less than $11\frac{1}{2}$ times. As above stated, muriate of potash is 50 per cent., or one-half actual "potash." It would therefore require 40 pounds of the muriate to furnish the 20 pounds of potash required in the formula. Adding these materials together we get the following result:

Material.	Fertilizing Constituents.		
	Ammonia.	Phosphoric Acid.	Potash.
	Lbs.	Lbs.	Lbs.
Nitrate of soda, 110 lbs.....	21	--	--
Acid phosphate, 1,150 lbs.....	--	161	--
Muriate of potash, 40 lbs.....	--	--	20
Total, 1,300 lbs.....	21	161	20

USE OF MAKEWEIGHT.

This statement shows that it has required only 1,300 pounds of these three materials to give the number of pounds of ammonia, phosphoric acid and potash necessary to give the percentage in a ton of fertilizer called for by our formula. We therefore have the option of either adding 700 pounds of some sort of makeweight—good dry sand or earth is as good as anything—to bring up the weight to a ton, or of using the fertilizer at a smaller rate per acre. In other words, 130 pounds of this mixture, just as it stands, will produce the same effect as 200 pounds after the dirt or other makeweight has been added, while this makeweight will add nothing whatever to the value of the fertilizer except to give the user a little more exercise in handling it and the railroads a little more freight, when it is purchased in the ready-mixed fertilizer.

COST.

If the material for this mixture were purchased by the single sackful the cost should be about $2\frac{3}{4}$ cents per pound for the nitrate of soda, $2\frac{1}{2}$ cents for the muriate of potash, and 80 cents per hundred for the acid phosphate.* At these rates the ton of fertilizer would cost, exclusive of mixing, as follows:

*The retail price of 14 per cent. acid phosphate runs from \$14.00 to \$18.00 per ton, in Ohio, the price depending upon the information of the purchaser. Muriate of potash has been offered at \$4.60 for a 200 pound sack, or \$46.00 per ton, delivered at any Ohio point.

110 lbs. nitrate of soda at 2½c per lb.....	\$3 05
1,150 lbs. acid phosphate at \$16 per ton.....	9 20
40 lbs. muriate of potash at 2½c per lb.....	1 00
Total.....	<u>\$13 35</u>

If bought in carloads, under recent quotations the cost would be approximately as follows:

110 lbs. nitrate of soda at \$54 per ton.....	\$2 97
1,150 lbs. acid phosphate at \$13 per ton.....	7 48
40 lbs. muriate of potash at \$44 per ton.....	88
Total.....	<u>\$11 33</u>

As there are dealers who will sell these materials in mixed carloads it would certainly be good business policy for neighboring farmers to join hands and purchase in carloads.

LOW GRADE FERTILIZER.

Dried swamp muck usually contains 2 per cent. or more of nitrogen, and this material is being quite extensively used as the carrier of nitrogen in the cheap grades of fertilizers. A 1-8-1 fertilizer might be made up of muck, slaughterhouse tankage, acid phosphate and muriate of potash, as below:

Material.		Cost.	Fertilizing Constituents.		
			Ammonia.	Phosphoric Acid.	Potash.
			Lbs.	Lbs.	Lbs.
Dried muck.....	800 lbs.	\$0 80	16		
Tankage (7-30).....	200 lbs.	2 50	14	26	
Acid phosphate.....	960 lbs.	7 68		134	
Muriate of potash.....	40 lbs.	1 00			20
Total.....	2,000 lbs.	\$11 98	30	160	20

This estimate allows \$2.00 per ton for collecting and drying the muck, a liberal allowance when it is remembered that limestone is quarried, ground into a fine powder and put on the cars for \$1.00 per ton.

Tankage is the residue left when scraps of meat, bone, etc., are cooked to extract the grease. It is dried and ground into a meal which varies in composition. A 7-30 tankage is one analyzing 7 per cent ammonia, and 30 per cent. "bone phosphate," bone phosphate meaning

a compound containing the same percentage of phosphoric acid contained in bone ash, namely: about 46 per cent.

A 1-8-1 fertilizer, however, is a very low grade. It requires just as much work to apply the 200 pounds of actual fertilizing constituents contained in a ton of such a fertilizer as to apply twice that quantity in a ton of higher grade, while the freight on the lower grade is twice as much as on the higher. The following formulæ are such as are used by the Experiment Station:

FORMULA.

Material.	Cost.	Fertilizing Constituents.		
		Ammonia.	Phosphoric Acid.	Potash.
		Lbs.	Lbs.	Lbs.
For Spring Crops.				
Nitrate of Soda.....	250 lbs.	\$6 87	47	-----
Acid phosphate.....	1,550 lbs.	12 40	217	-----
Muriate of potash.....	200 lbs.	5 00	-----	100
Total.....	2,000 lbs.	\$24 27	47	217
Percentage.....	-----	2 1-3	10 3-4	5
For Wheat.				
Steamed bone meal.....	700 lbs.	\$9 10	17	175
Acid phosphate.....	900 lbs.	7 20	126	-----
Muriate of potash.....	120 lbs.	3 00	-----	60
Nitrate of soda.....	280 lbs.	7 70	51	-----
Total.....	2,000 lbs.	\$27 00	68	301
Percentage.....	-----	3-4	15	3
An Animal Matter Fertilizer.				
Steamed bone meal.....	1,000 lbs.	\$13 00	25	250
7-30 tankage.....	800 lbs.	11 20	56	104
Muriate of potash.....	200 lbs.	5 00	-----	100
Total.....	2,000 lbs.	\$29 20	81	354
Percentage.....	-----	4	17 3-4	5

In using the second formula it is the Station's practice to reserve the nitrate of soda and sow it broadcast in April, after the wheat has started into growth. The formula is now used at the rate of 350 to 400 pounds per acre on wheat grown in a rotation of corn, oats, wheat and clover on 10 acre fields. The result has been an average yield of

nearly 34 bushels of wheat per acre for the last seven years, as against a previous 10-year average of 20 bushels, when the wheat received no fertilizer but was top-dressed with yard manure.

The last formula is made up of the materials that are used in the better grades of ready-mixed fertilizers. It contains a sufficient quantity of each of the fertilizing constituents to make two tons of a 2-8-2 fertilizer.

THE COST OF HOME-MIXING.

The materials above mentioned are all in the condition of coarse salts or fine powders. They have gone through such processes of manufacture as fit them for becoming articles of commerce; two of them acid phosphate and steamed bone meal, are in common use by farmers, who know they are in condition for use in the ordinary fertilizer drill; the other two resemble common salt in character, and only need to have lumps removed by sifting and pulverizing. These materials may be mixed together in any proportion, and when mixed they are ready for distribution by hand or drill. The mixing itself is a less intricate operation than the mixing of sand and lime into mortar, for no slaking is required, and the work may be done on any dry floor—a hard dirt floor is good enough—and with no other tools than those used in mixing mortar. Fifty cents per ton would be a very liberal allowance for the labor cost of mixing.

WHY NOT HOME MIXING?

Fertilizer dealers are interested in persuading the farmer that he should not attempt home mixing, for the reason that at the prices at which the ready-mixed fertilizers are usually sold there is a larger margin of profit to the dealer than on the separate materials. It is true that some brands of mixed fertilizers have been offered at prices which would make home mixing unnecessary from the standpoint of cost; but farmers should learn the principles of home mixing, and should not be deluded into paying a higher price for the nitrogen, phosphorus and potassium in a fertilizer with a fancy name, than the same quantities of these ingredients can be purchased for in nitrate of soda, acid phosphate and muriate of potash, for it has been demonstrated beyond all contradiction that no more effective fertilizing materials than these can be found in any fertilizer on the market.

THE BEST IS THE CHEAPEST.

As has been stated above, acid phosphates vary in composition from 10 percent. or under, to 18 per cent. or over of available phos-

phoric acid; in other words a ton of 10 per cent. acid phosphate will carry 200 pounds of useful phosphoric acid, while a ton of 18 per cent. will carry 360 pounds, or nearly twice as much. The Ohio supply of acid phosphate comes chiefly from Tennessee, and fully one-third of its cost to the Ohio farmer is represented in the item of freight, and the freight is just as much on the ton of 10 per cent. as on the ton of 18 per cent. phosphate, as is also the farmer's labor in hauling out and applying the fertilizer to his fields; hence the cost of the pound of available phosphoric acid—of actual plant food—is necessarily much greater in the low grade than in the high grade article, notwithstanding the lower price per ton at which the low grade phosphate may be sold. •

RAW MATERIALS FOR HOME-MIXING.

Owing to the increased demand for raw materials used for home-mixing of fertilizers, we give below names and addresses of firms furnishing nitrogen and potash, raw rock phosphate and dried manures, who had license to sell in Ohio during 1912. This does not include bone and acid phosphates, which can be bought of nearly every firm having license to sell in this state during the current year.

MATERIALS CONTAINING AMMONIA.

SULPHATE OF AMMONIA.

American Coal Products Co., New York, N. Y.

NITRATE OF SODA.

The American Agricultural Chemical Co., Cleveland, Ohio.
 Armour Fertilizer Works, Chicago, Ill.
 Darling & Company, Chicago, Ill.
 Swift & Company, Chicago, Ill., or Cleveland, Ohio.
 The Groves Company, Cincinnati, Ohio.
 The M. Hamm Company, Washington C. H., Ohio.
 The Independent Packers' Fertilizer Co., Columbus, Ohio.
 International Agricultural Corporation, Buffalo Fertilizer Works, Buffalo, N. Y.
 The Jarecki Chemical Co., Sandusky and Cincinnati, Ohio.
 The Marietta Bone & Phosphate Co., Marietta, Ohio.
 Nitrate Agencies Company, Chicago, Ill., and New York, N. Y.
 Piedmont-Mt. Airy Guano Co., Baltimore, Md.
 The Smith Agricultural Chemical Co., Columbus, Ohio.

DRIED BLOOD.

The American Agricultural Chemical Co., Cleveland, Ohio.
 Swift & Company, Chicago, Ill., or Cleveland, Ohio.

TANKAGE.

American Reduction Company, Pittsburgh, Pa.
 The American Agricultural Chemical Co., Cleveland, Ohio.
 Conneaut Reduction Co., Conneaut, Ohio.
 The J. L. & H. Stadler Rendering & Fertilizer Co., Cleveland, Ohio.
 The F. C. Steadman Co., Athens, Ohio.

MATERIALS CONTAINING POTASH.

MURIATE OF POTASH.

The American Agricultural Chemical Co., Cleveland, Ohio.
 Armour Fertilizer Works, Chicago, Ill.
 Darling & Co., Chicago, Ill.
 German Kali Works, Baltimore, Md.
 The Groves Co., Cincinnati, Ohio.
 The Geo. E. Howell Provision Co., Newark, Ohio.
 The Independent Packers' Fertilizing Co., Columbus, Ohio.
 International Agricultural Corporation, Buffalo Fertilizer Works, Buffalo, N. Y.
 The Marietta Bone & Phosphate Co., Marietta, Ohio.
 The New Process Fertilizer Co., Columbus, Ohio.
 Nitrate Agencies Co., Chicago, Ill., and New York, N. Y.
 Piedmont-Mt. Airy Guano Co., Baltimore, Md.
 Pioneer Fertilizer Company, Chicago, Ill., or Cleveland, Ohio.
 Swift & Company, Chicago, Ill., or Cleveland, Ohio.
 The Smith Agricultural Chemical Co., Columbus, Ohio.

SULPHATE OF POTASH.

The American Agricultural Chemical Co., Cleveland, Ohio.
 Darling & Company, Chicago, Ill.
 German Kali Works, Baltimore, Md.
 International Agricultural Corporation, Buffalo Fertilizer Works, Buffalo, N. Y.
 Nitrate Agencies Co., Chicago, Ill., and New York, N. Y.
 Pioneer Fertilizer Company, Chicago, Ill., or Cleveland, Ohio.
 The Smith Agricultural Chemical Co., Columbus, Ohio.

KAINIT.

The American Agricultural Chemical Co., Cleveland, Ohio.
 Armour Fertilizer Works, Chicago, Ill.
 German Kali Works, Baltimore, Md.
 Nitrate Agencies Co., Chicago, Ill., and New York, N. Y.
 Pioneer Fertilizer Company, Chicago, Ill., or Cleveland, Ohio.

ASHES.

Swift & Co., Chicago, Ill., or Cleveland, Ohio.
 William H. Teare & Co., Cleveland, Ohio.

DRIED MANURE.

(Sheep and Cattle.)

Natural Guano Co., Aurora, Ill.
 The Pulverized Manure Co., Chicago, Ill.
 Swift & Company, Chicago, Ill., or Cleveland, Ohio.

MATERIALS CONTAINING PHOSPHORIC ACID.

RAW ROCK PHOSPHATE.

American Fertilizer Company, Santa Fe, R. D. 3, Tenn.
The Central Chemical Co., Hagerstown, Md.
Central Phosphate Co., Mt. Pleasant, Tenn.
Farmers' Ground Rock Phosphate Co., Mt. Pleasant, Tenn.
Federal Chemical Co., Inc., Columbia, Tenn., and Louisville, Ky.
Mt. Pleasant Fertilizer Co., Mt. Pleasant, Tenn.
John Ruhm, Jr., Mt. Pleasant, Tenn.

BASIC SLAG PHOSPHATE.

The Coe-Mortimer Company, New York, N. Y.

FIELD EXPERIMENTS WITH FERTILIZERS.

BY CHAS. E. THORNE,

Director Ohio Experiment Station.

The statistics of crop production in Ohio show that about three million acres of corn are grown annually, nearly two million acres of wheat, and about a million and one-third acres of oats. Three quarters of a million acres of clover are mown for hay and about two million of other grasses than clover, while nearly seven million acres are pastured.

Many farmers in the state practice a more or less systematic rotation in which corn, oats and wheat are grown in succession, followed by clover and timothy. Some practice a regular 5-year rotation, while more mow or pasture the timothy for several years. In the southern and western counties two crops of corn are frequently grown in succession to be followed directly by wheat, omitting the oats crop, and in the river valleys there is too much continuous culture of corn, year after year on the same land.

YIELD FOR 10-YEAR PERIOD, 1900-1909.

During the 10-year period, 1900 to 1909, inclusive, the average yields of the principal crops were as shown in the table below. If these crops had been grown in a systematic rotation of corn, oats, wheat, clover and timothy, one year each, they would have removed from the soil during each 5-year period approximately the quantities of nitrogen, phosphorus potassium and calcium shown in the table, the yields of clover and straw being estimated on the proportion of stover or straw

to grain found in the Experiment Station's experiments, and the composition of the crops being based on the Station's analyses of Ohio grown crops.

TABLE I.
AVERAGE YIELD AND COMPOSITION OF OHIO CROPS.

Crop.	Yield per acre.	Fertilizing Constituents.			
		Nitrogen.	Phosphorus.	Potassium.	Calcium.
		Lbs.	Lbs.	Lbs.	Lbs.
Corn—grain.....	36.6 bus..	36.0	4.9	7.0	0.4
stover.....	1,900 lbs..	15.5	1.3	14.8	6.9
cobs.....	500 lbs..	2.5	0.1	3.3	0.3
Total.....		54.0	6.3	25.1	7.6
Oats—grain.....	32.5 bus..	20.9	4.3	6.0	0.8
straw.....	1,400 lbs..	8.1	1.2	15.3	5.0
Total.....		29.0	5.5	21.3	5.8
Wheat—grain.....	14.5 bus..	17.2	3.0	3.1	0.3
straw.....	1,600 lbs..	8.5	1.5	13.3	3.0
Total.....		25.7	4.5	16.4	3.3
Clover—hay.....	2,240 lbs..	48.5	4.1	25.2	31.8
Timothy—hay.....	2,260 lbs..	19.0	3.0	30.2	5.1

The table shows that the greater part of the nitrogen and phosphorus of the crop are found in the grain, and the greater part of the potassium and lime in the straw and stover. Hence it follows that in a system of agriculture in which grains only are sold off the farm, the hay and straw being returned to the land directly or in manure, the soil may be expected to show a deficiency in nitrogen and phosphorus long before any lack of the other three elements is manifested. This tendency to early exhaustion of phosphorus will be manifested even where the major part of the grains, as well as the rough produce, are fed, because phosphorus is a chief constituent of bone and nerve tissues, and the growing animal must extract from its food a large proportion of this element in building its skeleton, which it carries away from the farm when it goes to market. The same loss of phosphorus occurs in the production of milk, for milk

is the natural food of the young animal, and therefore must contain a plentiful supply of phosphorus.

Where the system of agriculture is such as to remove from the land not only the grain of the crop but the stem and leaves as well, as where tobacco is grown or where hay and straw are sold off the farm—a system which has been largely followed in the lower Miami Valley—it is to be expected that not only phosphorus but potassium also will be found deficient.

INDICATIONS OF LIME DEFICIENCY IN THE SOIL.

In respect to calcium—the basis of lime—it will be observed that most crops contain this element and phosphorus in almost equivalent proportions; in fact, the two elements are combined in bones as phosphate of lime. The clover crop however is peculiar in its use of lime, an acre of clover containing nearly ten times as much of this substance as an acre of wheat, and four times as much as an acre of corn, hence when lime becomes deficient in the soil the clover crop will be the first to suffer.

FERTILIZING THE CORN CROP.

EXPERIMENTS AT WOOSTER.

Four field experiments are being conducted by the Ohio Experiment Station, in which corn has been grown in rotation with other crops for periods of 8 to 18 years. One of these is located at the main station at Wooster, on a thin, sandy clay, originally occupied chiefly with white oak timber, but subject to exhaustive farming for nearly a century.

AT STRONGSVILLE.

The second is in Strongsville township, Cuyahoga county, north-eastern Ohio, on a thin, white clay, originally timbered with surface rooting trees, such as beech and elm, but which had been in pasture for 25 years before the experiment was begun.

AT CARPENTER.

The third is in southeastern Ohio at Carpenter, Meigs county, in a field of a hilly stock farm which had been used alternately for cropping and pasturage for many years. The soil is a light colored clay, the original timber chiefly white oak.

AT GERMANTOWN.

The fourth is at Germantown, Montgomery county, Southwestern Ohio, a clay farm of the general upland type of the Miami valley, originally timbered chiefly with white oak, with some sugar. This land also had been subjected to exhaustive cropping for many years.

EXPERIMENTS ON CROPS GROWN IN 3-YEAR AND 5-YEAR ROTATIONS.

In these experiments the rotations are a 5-year rotation of corn, oats, wheat, clover and timothy at Wooster and Strongsville, and a 3-year rotation of corn, wheat and clover at Carpenter and Germantown.

The following tables show the average outcome of these experiments to the end of the year 1912.

Table II exhibits the effect of the three fertilizing elements, nitrogen, phosphorus and potassium, as carried in nitrate of soda, acid phosphate and muriate of potash, on the corn crop in these experiments.

TABLE II.

INCREASE PER ACRE FROM DIFFERENT FERTILIZING ELEMENTS ON CORN GROWN IN ROTATION.

Treatment.	Station and increase per acre.			
	Wooster, 18-yr. av.	Strongsville, 18-yr. av.	Germantown, 9-yr. av.	Carpenter, 9-yr. av.
	Bushels.	Bushels.	Bushels.	Bushels.
Phosphorus alone.....	7.5	8.7	7.4	7.1
Potassium alone.....	4.6	0.9	-----	-----
Nitrogen alone.....	4.8	1.4	-----	-----
Potassium and nitrogen.....	6.8	2.4	4.5	2.1
Phosphorus and potassium.....	14.2	9.6	13.2	8.0
Phosphorus and nitrogen.....	14.5	10.0	9.1	6.5
Phosphorus, potassium and nitrogen..	18.4	11.7	14.9	11.9

At Wooster and Strongsville phosphorus is given to the corn crop in 80 pounds of acid phosphate per acre, and at Germantown and Carpenter in 120 pounds; muriate of potash is used at the rate of 80 pounds

at Wooster and Strongsville and of 20 pounds at Germantown and Carpenter; and nitrate of soda is used at the rate of 160 pounds at Wooster and Strongsville and of 80 pounds at Germantown and Carpenter.

The table shows that in every case there has been a large increase of crop from the application of phosphorus. When potassium and nitrogen have been used alone they have each produced a little more than half the increase at Wooster given by phosphorus, but when combined with each other the effect is still below that of phosphorus, although when either or both of them is combined with phosphorus the combined increase is greater than the sum of the separate increases.

On the old pasture field at Strongville, however, the increase produced by the applications of potassium and nitrogen has been but about a bushel per acre for each element, whether used separately or in combination—an increase far below the additional cost of the fertilizer.

At Germantown the results indicate a relatively large effect from potassium and nitrogen in combination. (The separate applications of nitrogen and potassium have not been made at Germantown and Carpenter).

At Carpenter the results are similar to those at Germantown, although the rate of increase is smaller.

An important point in these experiments is brought out by Table III, which shows that there has been a cumulative effect from the fertilizers, the increase being greater during the second rotation than during the first in every case except on the land receiving phosphorus only at Germantown. As each crop is grown every season, the periods at Wooster and Strongsville include 5 crops, and those at Germantown and Carpenter 3 crops. The meaning of this outcome is that the full effect of a fertilizer is never realized in the crop to which it is applied, but is distributed over several subsequent crops. It will be observed that this increased effect during the latter period has always been more than enough to offset any reduction in yield of the unfertilized land, with the one exception noted.

TABLE III.
CUMULATIVE EFFECT OF FERTILIZERS ON CORN.

Treatment.	Station.	Period.		
		First.	Second.	Third.
		Yield per acre.		
		Bushels.	Bushels.	Bushels.
Unfertilized.....	Wooster.....	31.9	30.8	31.0
	Strongsville....	26.1	20.8	32.1
	Germantown....	46.4	45.2	35.1
	Carpenter.....	36.4	36.0	34.3
		Increase per acre.		
Phosphorus only	Wooster.....	4.0	9.7	9.8
	Strongsville....	4.0	13.4	8.4
	Germantown....	8.7	6.1	7.5
	Carpenter.....	2.8	6.6	11.9
Phosphorus and potassium.....	Wooster.....	7.2	14.2	19.4
	Strongsville....	4.5	10.9	13.5
	Germantown....	10.4	14.7	14.6
	Carpenter.....	6.3	8.2	10.5
Phosphorus, potassium and nitrogen.....	Wooster.....	8.4	19.4	24.0
	Strongsville....	9.4	13.0	12.5
	Germantown....	11.6	16.7	16.4
	Carpenter.....	8.4	12.6	14.9

FERTILIZING THE WHEAT CROP.

Table IV shows the effect of the different fertilizing elements on the wheat crops grown in these experiments, the wheat receiving the same kinds and quantities of fertilizing materials as the corn at Germantown and Carpenter, but getting twice as much phosphorus and one-fourth more potassium at Wooster and Strongsville.

TABLE IV.

INCREASE PER ACRE FROM DIFFERENT FERTILIZING ELEMENTS ON WHEAT GROWN IN ROTATION.

Treatment.	Station and increase per acre.			
	Wooster, 19-yr. av.	Strongsville, 15-yr. av.	Germantown, 7-yr. av.	Carpenter, 8-yr. av.
	Bushels.	Bushels.	Bushels.	Bushels.
Phosphorus alone.....	7.9	7.0	4.9	4.5
Potassium alone.....	1.2	*0.5	-----	-----
Nitrogen alone.....	1.9	*0.3	-----	-----
Potassium and nitrogen.....	2.7	1.6	1.3	2.2
Phosphorus and potassium.....	9.0	8.2	6.3	6.4
Phosphorus and nitrogen.....	13.1	10.0	7.1	6.0
Phosphorus, potassium and nitrogen..	15.8	9.9	8.9	8.9

*Decrease.

Table IV shows that in wheat, as on corn, phosphorus has been the dominant element in increasing the yield. Potassium and nitrogen, when used alone, have produced a very small increase at Wooster and none at all at Strongsville, the yield on these plots at Strongsville being less than when no fertilizer has been used. The combination of potassium and nitrogen has produced a small increase in every test, but never enough to pay its cost. When nitrogen has been added to phosphorus the yield has been largely increased in every case, and when potassium has been added to this combination of nitrogen and phosphorus a further gain has been made in every case except at Strongsville where again the influence of potassium has been injurious, rather than beneficial.

One hundred pounds of muriate of potash, added to the dressing of phosphorus and nitrogen, has increased the yield at Wooster by a little more than three bushels, but 20 pounds of the same salt has added the same increase at Carpenter and nearly two bushels at Germantown. It appears therefore, that the use of potassium at Wooster and Strongsville has been excessive.

RESIDUAL EFFECT OF FERTILIZERS ON CLOVER AND TIMOTHY.

As has been stated above, in these experiments the fertilizers are all applied to the grain crops, and the clover, or clover and timothy,

follow as gleaners; but Table V shows that these crops derive a very material benefit from the treatment of the preceding crops:

TABLE V.
RESIDUAL EFFECT OF FERTILIZERS ON CLOVER AND TIMOTHY.

Treatment.	Station and increase per acre.					
	Wooster.		Strongsville.		German- town.	Carpen- ter.
	Clover, 18-yr. av.	Timothy, 17-yr. av.	Clover, 16-yr. av.	Timothy, 9-yr. av.	Clover, 8-yr. av.	Clover, 8-yr. av.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Phosphorus alone.....	550	293	934	273	552	368
Potassium alone.....	239	134	83	*149	-----	-----
Nitrogen alone.....	357	430	191	75	-----	-----
Potassium and nitrogen....	442	374	243	29	155	12
Phosphorus and potassium...	995	495	670	438	650	632
Phosphorus and nitrogen...	1,172	840	775	427	735	460
Phosphorus, potassium and nitrogen.....	1,445	991	870	504	683	761

*Decrease.

Table V agrees with all that have been given before in showing that phosphorus has been by far the most effective single element, but that in all the tests, except on the clover crop at Strongsville, the effect of the fertilizers has been materially enhanced when phosphorus has been combined with either potassium, or nitrogen, or both.

THE FINANCIAL OUTCOME.

All this work, however, would be of no practical value to the farmer if the fertilizers were costing more than the value of the increased crop produced. This point is illustrated in Table VI, in which the cost of the fertilizers is estimated on the basis of \$16.00 per ton for 14-per cent. acid phosphat³, 2½ cents per pound for muriate of potash and 3 cents per pound for nitrate of soda, prices at which these materials should be purchased at retail, delivered freight paid, at the average Ohio railway station, and the value of the increase is computed on the basis of 50 cents per bushel for corn, 33⅓ cents for oats, 90 cents for

wheat and \$8.00 per ton for hay, no account being taken of the increase of straw and stover, which are assumed to balance the labor of applying the fertilizer and of harvesting the additional crop produced.

TABLE VI.

AVERAGE ANNUAL COST OF FERTILIZERS, VALUE OF INCREASE AND NET GAIN OR LOSS (—) PER ACRE.

Station.	Treatment.						
	Phosphorus alone.	Potassium alone.	Nitrogen alone.	Potassium and nitrogen.	Phosphorus and potassium.	Phosphorus and nitrogen.	Phosphorus, potassium and nitrogen.
Wooster::							
Value of increase	\$3 43	1 21	1 72	2 24	5 06	6 45	7 92
Cost of fertilizer	52	1 30	2 88	4 22	1 82	3 40	4 70
Net gain or loss (—)	2 91	—09	—1 16	—1 98	3 24	3 05	3 22
Strongsville:							
Value of increase	3 72	—0 95	0 32	0 93	4 00	4 55	4 92
Cost of fertilizer	0 52	1 30	2 88	4 22	1 82	3 40	4 70
Net gain or loss (—)	3 20	—2 25	—2 56	—3 29	2 18	1 15	0 22
Germantown:							
Value of increase	3 44	-----	-----	1 36	4 98	4 62	6 05
Cost of fertilizer	0 63	-----	-----	1 93	0 97	2 23	2 57
Net gain or loss (—)	2 81	-----	-----	—0 57	4 01	2 39	3 48
Carpenter:							
Value of increase	3 01	-----	-----	1 04	4 17	3 49	5 66
Cost of fertilizer	0 03	-----	-----	1 93	0 97	2 23	2 57
Net gain or loss (—)	2 38	-----	-----	—0 89	3 20	1 26	3 09

As previously stated, the carrier of phosphorus employed in these experiments has been acid phosphate, and it has been used on each of the cereal crops in the rotations at the rate of 80 to 160 pounds per acre, the total application being equivalent to an annual dose of 64 pounds for each of the 5 crops grown at Wooster and Strongsville, and of 80 pounds for each of the three crops grown at Germantown and Carpenter. Thus used, the phosphate when used alone has produced increase worth from 4 to 7 times its cost.

Nitrogen and potassium, as carried in nitrate of soda and muriate of potash—and these are both the cheapest and most effective carriers of these elements available, considering the price at which “ammonia” and “potash” are sold in mixed fertilizers—have been used at a loss when used separately or in combination with each other only. When, however, potassium has been combined with phosphorus the net gain has been greater than that from phosphorus alone in every case except

at Strongsville. The combination of nitrogen with phosphorus has not given so large a net gain as that from phosphorus alone, but when potassium has been added to this combination the net gain, again excepting Strongsville, has exceeded that from the phosphorus alone, notwithstanding the greatly increased cost of the fertilizer.

At Wooster and Strongsville the dose of potassium for the entire rotation has been equivalent to an annual application of 52 pounds of muriate of potash. At Germantown and Carpenter it has amounted to but 13 pounds of the muriate annually. The total increase for this smaller quantity has been nearly as great at Germantown and Carpenter as from the larger quantity at Wooster, while the cost has been only about one-fourth as much. It is probable that a part of this difference is due to a greater need for potassium in the soils at the southern test-farms, but this only makes it the more certain that potassium has been used extravagantly at Wooster and Strongsville. That potassium is of some service on both these soils, however, is seen by comparing the total value of increase, as shown in the last two columns of Table VI.

LIMING THE LAND.

Experiments with lime were begun at Wooster in 1900, the lime being applied across the west half of each of the five ranges of plots used in the 5-year rotation, liming unfertilized and fertilized land alike. This work has been continued since, with the average outcome indicated in Table VII, which is calculated to the end of the year 1911.

TABLE VII.

EFFECT OF LIME ON CROPS GROWN IN ROTATION AT WOOSTER.

Crops.	Treatment.				
	No fertilizer nor lime. Total yields per acre.	Increase per acre.			
		Phosphorus.	Phosphorus and potassium.	Phosphorus, potassium and nitrogen.	Phosphorus, potassium, nitrogen and lime.
Corn, bushels.....	26	10	14	20	32
Oats, bushels.....	31	19	21	29	31
Wheat, bushels.....	9	9	10	19	22
Clover, pounds.....	1,600	570	890	1,470	2,200
Timothy, pounds.....	1,900	650	840	1,850	3,520
Value of total increase.....		\$24 30	\$29 90	\$50 00	\$69 00
Cost of fertilizer and lime.....		2 60	9 10	23 50	29 50
Net gain.....		21 70	20 80	26 50	39 50

Table VII brings out strikingly the improvidence of halfway measures in dealing with soil so completely exhausted of all the elements of fertility as this land has become under the close cropping which has been practiced on it for many years. It does not follow, however, that all soils will be benefited by lime to the extent shown here. The Germantown Test-farm is located on a deep bed of glacial drift, made up largely from the decomposition of limestone gravel, and while this soil, like that at Wooster, shows the effect of hard usage in its quick response to fertilizers, lime is having comparatively little effect, the 7-year average increase from 1000 pounds of quicklime being apparently about half a bushel of wheat and 150 pounds of clover hay.

CONCLUSIONS.

The lesson taught by these experiments is that on soils which have been subjected to close cropping for many years some method must be devised for the systematic return to all soils of available phosphorus, potassium and nitrogen, and to some soils of lime in addition, if the highest results are to be attained. Other experiments than those reported here show that the loss of nitrogen and potassium may be largely reduced by the production, saving and use of manure, and that by this method the cost of fertility maintenance may be greatly reduced; the principle, however, remains the same; namely, that the supply of the four elementary substances named must be maintained in the soil by some means if the land is to return the greatest profit to the farmer. A further lesson suggested is that by the intelligent foresight which science now makes possible the deterioration which is now taking place in our soils may be not only stopped but converted into improvement, and this by measures which will bring a steadily increasing income to the farmer.

RAW PHOSPHATE ROCK AS A FERTILIZER.

BY CHAS. E. THORNE.

Director Ohio Experiment Station.

The carrier of phosphorus usually employed in compounding chemical fertilizers is a phosphatic rock, found in certain parts of South Carolina, Florida and Tennessee. In this rock the phosphorus is combined with lime in nearly the same proportions in which the same two substances are combined in animal bone; but in its natural condition the phosphate rock is found to be nearly insoluble, and as the food of plants must first be dissolved in water the action of the natural phos-

phate rock has been found to be extremely slow, even when the rock has been ground into the almost impalpable powder known as floats.

WHY IS ROCK PHOSPHATE TREATED WITH SULPHURIC ACID?

To overcome this difficulty it has been customary to treat the rock with Sulphuric acid, using approximately equal quantities of the two. the acid converting the rock into a soluble form, and making a product known as "super-phosphate," or more commonly, as "acid phosphate."

WHAT ARE THE KNOWN CARRIERS OF PHOSPHORUS?

Bones were used as carriers of phosphorus to crops long before the phosphate rock was discovered, and the discovery was made many years ago that bones might be softened and thus made more easily soluble by compacting them for some months with manure. In view of this fact, an experiment was begun at the Ohio Experiment Station in 1897, in which both floats and acid phosphate were incorporated with manure and plowed under for corn in a 3-year rotation of corn, wheat and clover, the manure being used in two conditions, either fresh from stables in which steers were being fattened, or from the same stables, but first thrown into an open yard and allowed to lie from January until April exposed to the weather before being spread on the field.

COMPARISON BETWEEN FLOATS AND ACID PHOSPHATE.

Both acid phosphate and floats have been used at the rate of 40 pounds per ton of manure, equivalent to nearly one pound per 1000-pound animal per day, and the manure has been used at the rate of 8 tons per acre.

Taking the average results of this test for the 16 years, 1897 to 1912, inclusive, and valuing corn at 50 cents per bushel, wheat at 90 cents and hay at \$8.00 per ton, we find that the floats—treated manured have produced crops having an annual value greater by \$3.94 per acre than those grown from the untreated manures, while the crops grown from the manures treated with acid phosphate have been greater by \$4.00 per acre annually than those grown from the untreated manures.

The cost of treatment with floats is estimated to have been 43 cents per acre annually, and that from the acid phosphate, 70 cents per acre, comparison being made on the basis of bulk carloads, hence the floats has been the cheaper material to use, by about 20 cents per acre annually.

As the floats has carried twice as much phosphorus to the soil as the acid phosphate, it appears that the manure is rendering only a part of the phosphorus in the floats available. Whether the unused phosphorus will become available to future crops is for the future to determine.

ANOTHER COMPARISON BETWEEN FLOATS AND ACID PHOSPHATE.

Another comparison between floats and acid phosphate was begun at Wooster in 1905 in a 3-year rotation of corn, oats and clover. The outcome of the test for the 8 years, 1905 to 1912, is summarized below:

Plot.	Treatment.	Net Annual Value of Increase.
17	Caustic lime..... 1,000 lbs. } Acid phosphate.. 320 lbs. } Muriate of potash 40 lbs. }	\$3 97
18	Caustic lime..... 1,000 lbs. } Floats..... 320 lbs. } Muriate of potash 40 lbs. }	\$3 43
21	Acid phosphate.. 320 lbs. } Muriate of potash 40 lbs. }	\$1 59
24	Floats..... 320 lbs. } Muriate of potash 40 lbs. }	\$0 57
20	Acid phosphate.. 320 lbs.	\$0 86
23	Floats..... 320 lbs.	\$0 33

In the above statement the cost of treatment has been deducted from the value of the increase.

EXPERIMENT IN FLOATS AT STRONGSVILLE.

In 1905 a third experiment in the use of floats was begun at the Strongsville test farm, where an experiment in the use of different combinations of fertilizing materials on crops grown in a 5-year rotation of corn, oats, wheat, clover and timothy had been in progress since 1895 in this third experiment ground limestone and floats are being applied side by side across all the plots in the test, the limestone being applied to the south ends of the plots at the rate of two tons per acre and the floats to the north ends at the rate of one ton per acre, both treatments being applied once in 5 years, and to the corn crop.

The outcome of this test is that on the unfertilized land the average total value of the five crops the rotation has amounted to \$37.19 per acre for the five years preceding the use of lime and floats, as against \$46.46 per acre for the limed land and \$60.73 per acre for the floats-treated land for the 8 years since this treatment was begun.

The ground limestone has cost about \$2.50 per ton or \$5.00 per acre, spread on the land, and the floats about \$8.50 per acre. Deducting these charges, the limed land has given a net income greater by \$4.00 for each 5-year rotation than the previous return from untreated land, and the floats-treated lands has returned a net gain of \$15.00 per acre for each rotation.

DO RESULTS JUSTIFY USE OF FLOATS?

Taken by itself this outcome would abundantly justify the use of floats; but part of this land has received acid phosphate at the rate of 320 pounds per acre for each rotation throughout the entire course of the experiment, with the result that the increase from the quantity of acid phosphate over the unfertilized yield has amounted to \$22.68 per acre for each rotation before the cross-dressings with lime and floats was begun, and to \$27.17 per acre on the limed land and to \$7.58 per acre on the floats-treated land during the later period. Adding these increases from acid phosphate to the unfertilized yields given above and deducting cost of treatment, we get the following results:

TOTAL VALUES PER ACRE FOR A FIVE-YEAR ROTATION.

	Untreated.	Limed.	Floats-Treated.
Unfertilized.....	\$37 19	\$46 46	\$60 73
Acid phosphate.....	22 68	27 17	7 58
Total.....	\$59 87	\$73 63	\$68 31
Cost of treatment.....	2 24	7 24	10 74
Net value.....	\$57 63	\$66 39	\$57 57

It would seem from these experiments that 320 pounds of acid phosphate has produced a total yield of \$59.87, on the unlimed land, as against a yield of \$60.73 from a ton of floats, and that the reenforcement of acid Phosphate with lime has very materially increased the total and net return.

FLOATS AND ACID PHOSPHATE APPROXIMATELY MEASURED BY ITS AVAILABILITY.

The floats used in this experiment was represented to contain about 3 per cent. available phosphoric acid, or 60 pounds to the ton. The acid phosphate used has been the 14 per cent. grade, which would amount to about 45 pounds of available phosphoric acid in the 320 pounds used on each rotation. It appears, therefore, that the value thus far realized from the floats has been approximately measured by its available phosphoric acid.

It will be observed that the acid phosphate has produced a much greater effect on the limed land than on that left without lime, thus supporting the experiment at Wooster, reported above. In the Strongsville test, lime and floats have not been used on the same land, but the test at Wooster shows that, although lime has added to the effectiveness of the floats, it has added much more to that of acid phosphate.

SHOULD FLOATS BE APPLIED DIRECT TO LAND?

The general outcome of all this work appears to be that whereas floats may be profitably used in stables or barnyards as a reinforcement of manure, it is not advisable to use it as a direct application to the land.

IMPORTANT

ANALYSIS OF COMMERCIAL FERTILIZERS.

BY N. W. LORD.

The analyses of a great many samples of fertilizers are given in this report. These analyses state the percentage of ammonia, of total Phosphoric acid, available phosphoric acid, insoluble phosphoric acid, and actual potash. They designate whether the potash is present as muriate or as sulphate and a statement is made of the source of the phosphoric acid, whether animal, mineral or both.

It will be noticed that in adding up these various percentages the total amounts to much less than 100 %. In other words, there is a large portion of the material unstated and unaccounted for in the analysis.

WHY?

Now why is it that the chemist only gives this partial analysis and what forms the rest of the fertilizer?

It is of course a matter of common knowledge that the only things in a fertilizer that gives it its value as a plant food are those reported, but this does not explain why they are only present in relatively small proportions, and their relation to the rest of the material.

To explain this the theme must be considered in detail.

AMMONIA.

Ammonia strictly speaking is a gas composed of two other gases—nitrogen and hydrogen. (It dissolves readily in water and this solution in water is what we know as ammonia or spirits of ammonia as we get it at any drug store.) Now ammonia can be prepared from a great many materials occurring in nature which contain nitrogen in proper forms. Among the substances from which ammonia could be prepared are bones, dried blood, tankage, nitrate of soda, sulphate of ammonia. These substances by proper treatment easily yield amounts of ammonia

varying from a few per cent. up to as high as 19 to 20, according to the nature and purity of the substance. These materials are used in the preparation of fertilizers and the ammonia specified in the analysis is the amount of ammonia that could be prepared from the material used in the fertilizers. When put in the soil these materials yield for the use of the plants the equivalent of ammonia stated in the analysis.

SMALL PERCENTAGE.

Now it will be seen that in no case does the ammonia form more than a small percentage of the weight of the material put in to furnish it. The rest is carbon, hydrogen, oxygen and various mineral substances naturally associated in the substances, and, therefore, in no sense impurities and from which it could not be separated without converting it into a gaseous form incapable of practical use.

These various substances furnishing ammonia are commercially designated as ammoniates and their value is entirely dependent on the percentage of ammonia that they will furnish.

MAKING THE ANALYSIS.

In making the analysis the chemist separates the ammonia from a weighted portion of the material and then weighs or measures it and thus be able to state the exact percentage yielded. As the only part of the ammonia of use to the plant is the nitrogen and as it is the nitrogen in the substance that forms ammonia, some chemists report only the nitrogen. One part of ammonia contains 14-17 parts of nitrogen and so by multiplying the percentage of ammonia by 14-17 the nitrogen is obtained.

PHOSPHORIC ACID.

Pure phosphoric acid is a white solid. It does not occur in nature in this form. It dissolves in water readily, forming an intensely sour solution. In this pure form it would be expensive to prepare and impractical to use on account of its corrosive and sticky nature, but like ammonia it occurs naturally in various substances, the most important sources being bones, certain rocks and minerals. In these substances it is combined naturally with lime or with iron or other substances which entirely change its physical nature but from which it can be separated with more or less ease by plants. However, the availability to the plant or the ease with which it can be extracted from the material by the plant is very different in different substances. By treating those substances in which it is less available with sulphuric acid its availability to the plant is very greatly increased.

AMOUNT.

Now the amount of phosphoric acid present in these natural substances is extremely variable. Natural bones contain about 20 to 25 per cent., the natural rock phosphates or minerals anywhere from 25 to 35 per cent., the rest of the material in these natural sources being principally lime and in the case of bones, organic matter like glue or gelatin, etc.

AMMONIUM CITRATE METHOD.

Now the chemists, as in the case of the ammonia, in analyzing these various materials or mixed fertilizers containing them, separate the phosphoric acid in some form in which it can be accurately weighed and in this way determine the amount of the total phosphoric acid present in its various sources. But the total percentage of the phosphoric acid is not always sufficient to determine its value. It is important to understand the degree of its availability to the plant. This is measured by the solubility of the phosphoric acid or the amount of it that will be dissolved from the fertilizer by a solution of ammonium citrate of a definite strength. The use of this solution has been authorized by chemists the world over as the best means of comparing the availability of the phosphoric acid in its different combinations. The percentage of phosphoric acid extracted in this way is called the available phosphoric acid. That not available and which is retained in the residue left behind after treatment with this solution is called the insoluble phosphoric acid. It will remain in the soil for a very long time without the plants being able to get hold of it.

AMMONIUM CITRATE TEST WHEN NOT APPLIED.

This solution of ammonium citrate as a means of determining the available phosphoric acid is not of universal application. There are certain substances, particularly raw bone and "basic slag," imported from Germany and found in certain steel works, owing to their peculiar nature in which the ammonium citrate is not a true test of the availability of the phosphoric acid. In these substances all of the phosphoric acid has been proved to be practically available to the plant, provided the material is finely ground and properly used, and hence in such cases the chemist states merely the total phosphoric acid, leaving its availability to be settled by the fact of its being present in the form of bone or of basic slag.

SOURCE OF PHOSPHORIC ACID.

It is for this reason that in giving the analysis of fertilizers, importance is attached to the source of the phosphoric acid, whether

animal or mineral. Where the source is mineral, which means that the phosphoric acid is derived entirely from naturally occurring rock, the insoluble phosphoric acid is practically useless, being locked up so tightly by its combination with lime. Where the source of the phosphoric acid is bone, however, the phosphoric acid insoluble in the citrate of ammonia and present as bone is still to a large extent, though somewhat slowly available to the plant. The distinction is not important as regards basic slags, because basic slags could not be economically mixed with acid rock or treated rocks, owing to the action of the acid upon the slag, and even if such an acid mixture were used the ammonium citrate method would more correctly test the slag after contact with the acid.

PRESENCE OF ANIMAL OR MINERAL MATTER, OR BOTH.

While it is possible for the chemist to detect with a microscope the presence of bone or similar organic sources of phosphoric acid in a mixture, it is a practical impossibility by chemical analysis alone to determine how much of the phosphoric acid is derived from bone and how much of it from the mineral substances, as there is no chemical difference between the two kinds of phosphoric acid, hence no attempt is made to make this distinction and the fertilizers are merely graded as to whether they contain bone alone, mineral matter alone, or a mixture of the two.

POTASH.

By actual potash is meant what the chemist would call potassium oxide, a white highly corrosive substance not occurring in nature in its pure state and not commercially obtainable, but as in the case of the other ingredients of fertilizers, it occurs naturally in many combinations with other substances, its principal source at present being the German potash salts, mined at Stassfurt, in which it is combined with chlorine or with sulphuric acid and mixed with more or less common salt and magnesia compounds. This combination containing chlorine and common salt is chemically known as containing potassium chloride or muriate. In certain other salts it occurs in combination with sulphuric acid, forming potassium sulphate.

PERCENTAGE PRESENT.

All of these materials are used in the composition of fertilizers and the chemist by separating it from the material in a weighable form determines the percentage of the potash present. The potash in these natural materials may be anywhere from 13% up to 50%, the rest being the

chlorine or sulphuric acid necessary to hold the potash in a form in which it can be handled and the naturally occurring impurities of the minerals.

DIFFERENCE BETWEEN MURIATE AND SULPHATE OF POTASH.

The chemist in addition to weighing the amount of actual potash in the fertilizer then determines the percentage of chlorine present and if this is much or more than would naturally combine with the potash, it is designated as occurring as muriate. If there is not present a sufficient quantity to combine with the potash, but sulphuric acid is present, the potash is regarded as present as sulphate.

SOLUBLE POTASH.

Potash occurs naturally in certain minerals in shapes unavailable to the plant and of practically no value in the fertilizer. Potash of this character cannot be dissolved in water even on prolonged boiling, hence in testing fertilizers the chemist only extracts that potash which is soluble in water, neglecting and not reporting any potash that is not so soluble.

SUBSTANCES REPRESENTING MATERIAL.

It will be seen from the above that all fertilizers contain in addition to the phosphoric acid, ammonia and potash reported by the chemist, a large amount of material present and representing the substances in which these fertilizing materials naturally occur.

"MAKE WEIGHTS."

In addition to these materials many fertilizers contain additions introduced by the manufacture either as "make-weights" or for the purpose of improving the fineness and dryness of the material. Of course the result of such additions is shown in the reduced percentages of the valuable ingredients. They increase the cost to the farmer by the freight paid on all this material, which has no value to the crop. This is the reason why fertilizers of low percentages of the analyzed ingredients are usually the most expensive to the farmer, even if actually bought at a comparatively low price per ton.

NECESSITY OF FERTILIZER ANALYSIS.

From the foregoing it is obvious that the value of the fertilizers can only be determined in one of two ways: either cheaply in the chemical

laboratories or by the far more expensive method of trying it on a large scale in the field and the latter merely gives the total result without any knowledge as to what ingredients produced it. The chemical analysis can be made in a few days and furnishes all the information necessary to foretell the effect of the fertilizers, but the determination of these substances requires the special training, skill and apparatus of the chemist. Nothing in the appearance, odor or feel of a fertilizer can be depended on to give any indication as to whether it is a worthless mixture or one containing large percentages of valuable plant food. Even the reputation which a fertilizer may have earned by crop experiments cannot replace the accurate knowledge given by the analysis, as it would only show what the material did last year and is no guarantee of what it will do this. Here is the great value of the analysis in that it is obtainable at once and gives in advance information by which the fertilizers may be purchased or used.

VALUE OF FERTILIZER ANALYSES TO THE FARMER.

The analyses of fertilizer are valuable to the farmer not merely as a guarantee that he receives what he pays for when he purchases the article, but also as a valuable guide to him in knowing what fertilizers to apply to the soil. Fertilizers are added to supply the deficiencies in the soil of the three important ingredients, phosphoric acid, ammonia and potash. The amount needed of any one of these ingredients varies with the crop, certain crops needing an extra quantity of one or more of them. Fertilizers will not take the place of proper cultivation nor of humus or organic matter in the soil, but they do supply material which in many cases cannot be obtained in any other way. In buying fertilizers the analyses should be consulted in order that the materials most needed may be added in the proper amount.

AMMONIA.

Ammonia is the most expensive by far of the three essentials. Ammonia can also be supplied to the soil by the proper use of clover, cow peas, soy beans and other similar crops. These plants get it from the air. Ammonia can be supplied by manure. Ammonia should only be purchased where farm sources are not properly available. Good farming in part consists in preserving and increasing the natural sources of ammonia on the farm by the use of manure and proper plants in rotation.

PHOSPHORIC ACID.

Phosphoric acid is needed on most Ohio soils. The amount in the soil cannot be increased by cropping. It usually pays to purchase it. It

is especially needed by grain crops. Barnyard manure contains too little phosphoric acid. Its value is greatly increased by adding phosphate to it. Insoluble phosphoric acid like that in raw rock is made available to a considerable extent when mixed with manure, but it is not available alone.

POTASH.

Potash is taken from the soil by hay and straw more than by grain. It is not naturally deficient in most Ohio soils. It is particularly needed by some crops like potatoes and tobacco. Some dark "mucky" soils need it naturally. Selling straw, hay and fodder tends to exhaust the potash from soils.

WORN-OUT SOILS.

In building up worn-out soils complete fertilizers may be needed at first to get crops started, but the continued use of them when not accompanied by return of organic matter to the soil by manure or clover will leave the land in worse shape than in the beginning.

"LOOKS" OF THE PLANT.

The "looks" of the plants will often indicate what is lacking. Ammonia promotes growth, and weak plants and light green foliage often go with lack of it, provided other conditions are right for growth. Lack of phosphoric acid and potash will sometimes show in character of grain as well as yield. Continued use of superphosphate (acid rock) tends to soil acidity. This can be corrected by lime or ground limestone.

AMMONIA OR NITROGEN.

BY E. E. SOMERMEIER.

Chemist Ohio State University, Columbus, Ohio.

Of the three essential fertilizer materials, ammonia, phosphoric acid and potash, ammonia is by far the most expensive. As has been already stated under "Analyses of Fertilizers," it is a chemical compound consisting of three parts by weight of hydrogen and fourteen parts by weight of nitrogen. Nitrogen is the portion that is of use to the plant. Free nitrogen is a colorless, odorless gas. Four-fifths of the air we breathe is composed of nitrogen. Combined with hydrogen, as has al-

ready been stated, it forms ammonia, a colorless gas having a strong, penetrating odor and readily soluble in water. Solutions of ammonia in water are sold under a number of different names, as "ammonia," "stronger ammonia," "spirits of hartshorn," "ammonia water," etc. The ordinary ammonia sold at the drug store should contain about 10% by weight of actual ammonia. Ammonia unites readily with acids to form salts. A well-known property of acids is the sour, acid taste, as the sour taste of vinegar or of lemon juice, etc. Ammonia unites with the sour constituent of vinegar or of lemon juice to form a light colored salt readily soluble in water.

ORGANIC MATERIALS.

Many organic materials, as dried blood, bone, peat, humus, etc., contain nitrogen not in the form of ammonia but combined with other elements in complex and various forms. These different forms of nitrogen differ greatly from one another in their ready solubility in water and hence in their value for agriculture purposes, as the plant can use only that nitrogen which is soluble. Hence only those nitrogen carrying materials are of value to the farmer which contain the nitrogen in a soluble form or which contain it in such a form that it decomposes readily and becomes soluble in water within a reasonable period of time.

DETERMINING NITROGEN.

In determining the amount of nitrogen in a substance, as in dried blood, the chemist changes the nitrogen to ammonia and determines it in this form and in reporting the result he may report the sample as containing so many per cent. of ammonia, although the nitrogen may not have been actually present in the sample as ammonia. What is meant and what should be understood by the result for ammonia in this report, is that the sample contains nitrogen which if expressed as ammonia equals the percentage given under the heading of ammonia.

TERM AMMONIA INCLUDES ALL NITROGEN.

The use of the term ammonia to include all nitrogen in the sample is in everyday use in the trade. The market quotations for dried blood for example being given as follows: "Dried blood, 12 to 13% ammonia, \$3.00 per unit." This means that dried blood containing nitrogen equivalent to 12 or 13% of ammonia is selling at \$3.00 for each unit (20 pounds) of ammonia.

RELATION BY WEIGHT.

The relation by weight between nitrogen and ammonia is 14 to 17,

and in any case if the result given in per cent. of nitrogen is desired as per cent. of ammonia it is obtained by multiplying the nitrogen per cent-age by 17-14 or vice versa, if the result given as ammonia is wanted in terms of nitrogen, the per cent. of ammonia multiplied by 14-17 gives the equivalent nitrogen, hence dried blood containing the equivalent of 12% ammonia might be stated as dried blood containing 14-17 of 12-9.9 of nitrogen.

REQUIREMENT UNDER NEW LAW.

In recognition of the fact that all the nitrogen in fertilizers is not actually in the form of ammonia, and that the forms other than ammonia are not all equally valuable to the farmer, the Legislature enacted as a part of the fertilizer law a requirement that the manufacturer indicate the source of nitrogen in order that the purchaser may know whether or not he is buying nitrogen in a readily available form.

FORMS OF NITROGEN.

For purposes of further explanation and discussion these may be grouped into three classes.

(1) NITROGEN AS NITRATES, chiefly as sodium nitrate or Chili saltpeter. This salt contains approximately 16% of nitrogen corresponding to approximately 19% of ammonia. It is very readily soluble in water and hence quickly available to the plant for food.

(2) NITROGEN IN THE FORM OF AMMONIA, chiefly ammonium sulphate. This salt contains approximately 21% of nitrogen corresponding to about 25% of ammonia. Like sodium nitrate it is quickly soluble in water and is readily available to the plant for food.

(3) NITROGEN IN ORGANIC FORMS. As has already been stated, different organic materials from which nitrogen is derived differ very greatly in respect to the nitrogen availability. In some the nitrogen is soluble in water or the compound decomposes quickly and the greater part of the nitrogen becomes soluble, while in others the nitrogen remains almost wholly insoluble, and hence largely inert and worthless in so far as having any fertilizer value.

SOURCES OF HIGH AVAILABLE NITROGEN.

Some of the most important sources of high (or quickly) available nitrogen are as follows: bone, dried blood, slaughterhouse tankage, dried fish, cotton-seed meal, Peruvian guano.

SOURCES OF LOW AVAILABLE NITROGEN.

Some of the sources of low (or slowly) available nitrogen are as follows: peat, muck, untreated wool waste, sheep manure, garbage tankage.

LABORATORY METHODS.

A number of laboratory methods have been proposed to determine the relative value of the nitrogen in these different materials, the results obtained by these methods being compared with the results obtained by crop tests. The laboratory methods for determining the solubility of organic nitrogen most used are known as the alkaline permanganate method, the neutral permanganate and the pepsin hydrochloric acid method. The alkaline method has been adopted by New York, New Jersey and the New England states, while a number of the southern states use the neutral method.

LABORATORY TESTS INDEX OF AVAILABILITY OF NITROGEN.

The details of these laboratory tests are of no special interest to the purchaser of fertilizers but the results obtained are of very direct interest. The results obtained by the laboratory tests are an index of the availability of the nitrogen for plant food as shown by crop tests and hence the laboratory results serve as an index of the real value to the purchaser of the nitrogen in different materials. Some values are as follows:

Material.	Solubility of organic nitrogen by neutral permanganate method.*
Dried blood.....	95.6
Cottonseed meal.....	95.1
Ground bone.....	93.6
Dried fish.....	96.4
Tankage.....	95.1
Garbage tankage.....	58.9
Peat.....	42.8

With ammonia worth 17 or 18 cents per pound it behooves the farmer to know whether he is paying for ammonia (nitrogen) which the crops can use or whether he is buying it in the form of peat, muck, etc., in which most of it is not available. When buying, a safe motto is, "Buy high grade fertilizers" and avoid chances of paying for ammonia (nitrogen) from a large amount of peat and muck filler and also save the freight, hauling and sacking expenses on several hundred pounds of material, the value of which to say the least is questionable.

*Street, Journal of Industrial and Engineering Chemistry, July, 1910.

PRESERVE NATURAL SOURCES OF AMMONIA.

In addition to the use of nitrogen or (ammonia) in the form of commercial fertilizers it can and should be supplied to the soil by means of clover, cow peas, soy beans and other similiar crops. These plants are able to take the nitrogen from the air and change it into forms available for plant food. Barn-yard manure contains an appreciable amount of ammonia in a readily soluble form and hence quickly available for usc. However, this ready solubility often is the cause of the farmer losing many dollars worth of fertilizing materials by allowing this soluble portion of the manure to be wasted and hence allowing the waste of the most valuable ingredient—the ammonia. Good farming in part consists in preserving the natural sources of ammonia on the farm by saving and use of manure and the growth of proper plants in rotation and nitrogen (ammonia) should only be purchased on a farm in the form of commercial fertilizers where farm sources are insufficient or are not properly available.

FILLER OR MAKE-WEIGHT MATERIALS.

By E. E. SOMERMEIER.

Chemist Ohio State University, Columbus, Ohio.

HIGH GRADE RAW MATERIALS.

Some of the principal raw materials of which high grade fertilizers are composed are as follows:

- Sodium nitrate containing the equivalent of about 19% ammonia.
- Dried blood containing the equivalent of 12-13% ammonia.
- Tankage containing the equivalent of 9-11% and 15-20% bone phosphate (6.9-9.2 phosphoric acid).
- Ground bone containing about 4% ammonia and 50% bone phosphate (22.9% phosphoric acid).
- Steamed bone containing 14-3% ammonia and 50-60% bone phosphate (22.9-27.5% phosphoric acid).
- Acid rock phosphate containing about 14% available phosphoric acid.
- Sulphate of potash containing the equivalent of about 48% potash.
- Muriate of potash containing the equivalent of about 50% potash.

For more complete list see "Fence Rails," page 63 of this report.

A fertilizer made by simple mixture of these materials cannot help being relatively high in one or more of the fertilizer ingredients, ammonia, phosphoric acid and potash.

LOW GRADE FERTILIZERS.

In order to make low grade fertilizers as 1-8-2, 1-9-1 grades, etc., the manufacturer must put in a "filler" or "make weight" material, or what amounts to the same thing, use lower grade raw materials. For example, a ton of 1-8-2 fertilizer may be made from the following amounts of materials:

	A Lbs.	B Lbs.	C Lbs.
Tankage (10% ammonia and 5% available phosphoric acid).....	200	-----	-----
Nitrate of soda (19% ammonia).....	-----	-----	105
Acid phosphate (about 14% available phosphoric acid).....	1,070	1,140	1,140
Sulphate of potash (48% potash).....	84	84	84
Filler of sand, dirt, cinders, etc.....	646	-----	671
Filler of peat (3% ammonia).....	-----	776	-----
Total.....	2,000	2,000	2,000

Either mixture A, B, or C contains 1% ammonia, 8% phosphoric acid and 2% potash.

HIGH GRADE FERTILIZERS.

A higher grade fertilizer, as 2-10-3 may be made from these materials as follows:

	A Lbs.	B Lbs.	C Lbs.
Tankage (10% ammonia, 5% available phosphoric acid).....	400	-----	-----
Nitrate of soda (19% ammonia).....	-----	207	210
Acid phosphate (14% available phosphoric acid).....	1,280	1,420	1,420
Sulphate of potash (48% potash).....	126	126	126
Filler of peat (3% ammonia).....	-----	247	-----
Filler of sand, cinders, dirt, etc.....	194	-----	244
Total.....	2,000	2,000	2,000

Either mixture, A, B, or C, contains 2% ammonia, 10% phosphoric acid and 3% potash.

A COMPARISON.

A comparison shows relatively much less filler or inert material necessary in the higher grade fertilizers and such brands as 1-11-3, 2-10-6, 2-12-2, contain much less filler or make weight material than such brands as 1-8-2, 1-9-1, 2-8-2.

EXPENSE OF MAKE-WEIGHT.

The sacking, freight and hauling expenses on this filler in most cases amount to at least \$4.00 per ton, and every farmer will do well to ask himself the question, "Are sand, ground cinders, coal, dirt, lime-

stone and peat worth this much to the farm?" Whether it is present as a part of low grade material or is added directly as a make-weight or filler the cost is essentially the same. In so far as sand, cinders, coal and dirt are concerned, unquestionably they are of little value. Ground limestone may be valuable for some soils but can be more safely purchased as such, rather than to take chances of being the filler used. Peat contains humus and a portion of the nitrogen is available for plant food, but the nitrogen certainly is not nearly so valuable as nitrogen from bone or blood, and to pay \$4.00 per ton sacking and hauling on peat and dirt, and to pay for the fertilizer on the basis of 18 cents per pound for the ammonia equivalent to the nitrogen it contains, makes the peat cost the buyer about \$14.00 per ton on the farm. At this rate, allowing 20 pounds of dried peat per cubic foot, a peat bog of one foot thickness of compact peat costs over \$6,000 per acre by the time the peat is distributed on the farm. Ordinary dirt is likewise expensive as is shown by the following: Allowing 60 pounds of dry dirt per cubic foot, one foot in depth, if dried, sacked, shipped, hauled and distributed on the farm as a filler for fertilizer at a cost of \$4.00 per ton, amounts to about \$5,000 per acre for each foot in depth of dirt taken. Does any one think these materials are worth this price to his land? If so, he should continue to buy the low grade fertilizers. If not, he should buy higher grade fertilizers and apply less per acre.

DESCRIPTION OF ELEMENTS.

Agricultural chemists of the world have found that plant growth requires three elements of food—nitrogen, phosphorus and potassium. If any of these three elements are lacking in the soil no plant can grow.

Nitrogen increases foliage and gives size to the plant. To do this it should be in the most available form. When your crop is yellow and does not grow to size it lacks nitrogen.

Phosphorus hastens maturity, and thus often gives size and plumpness to the grain—which makes the ears of corn and heads of wheat fill with plump and ripe kernels. When the plant grows rank and dark green and keeps on growing, but does not mature and produce grain, it lacks phosphorus.

Potassium is necessary for the formation of starch and sugar in plants.

Approved by Chas. E. Thorne.

FENCE RAILS.

THE COMPOSITION OF SOME MATERIALS USED IN THE MANUFACTURE OF FERTILIZERS.

The following table gives the percentages of phosphoric acid, potash and nitrogen, and ammonia equivalent to the nitrogen, in a number of raw materials used in the manufacture and compounding of fertilizers. The percentages given usually represent the average and in many cases individual samples will vary considerably from the figures given.

SOURCES OF AMMONIA AND PHOSPHORIC ACID.

	Nitrogen.	Ammonia equivalent to the nitrogen.	Total Phos. Acid.	Soluble Potash.
Bone meal.....	3.70	4.50	22.	-----
Steamed bone.....	1.65	2.00	30.	-----
Dried blood.....	8-12	10-15	2.	-----
Dried fish.....	7.25	8.80	8.25	-----
Horn and hoof waste.....	13.25	16.09	1.83	-----
Cotton-seed meal.....	4.30	5.22	3.10	-----
Muck.....	1-2	1.	0.1	-----
Peat.....	2-2.5	2.43-3.0	0.1	-----
Slaughter-house tankage.....	5.8	6.10	10.5	-----
Garbage tankage.....	1.65-2.50	2.0-3.0	2-10	-----
Tobacco stems.....	2.35	2.85	0.7	8.2
Stable manure.....	0.5	0.6	0.3	0.6
Sulphate of ammonia.....	20.	24.3	-----	-----
Cynamid.....	15-17	18-20	-----	-----
Nitrate of soda.....	15.6	19.	-----	-----
Castor pomace.....	5.00	6.00	-----	-----

SOURCES OF PHOSPHORIC ACID.

Apatite.....	-----	-----	36.	-----
Raw phosphate rock.....	-----	-----	28-30	-----
Basic slag.....	-----	-----	19-23	-----
Bone black.....	-----	-----	28.	-----

SOURCES OF POTASH.

Muriate of potash.....	-----	-----	-----	51.
Sulphate of potash.....	-----	-----	-----	48.
Kainit.....	-----	-----	-----	13.
Sulphate of potash and mag- nesia.....	-----	-----	-----	30.
Wood ashes, unleached.....	-----	-----	1.70	5.25
Wood ashes, leached.....	-----	-----	1.50	1.27

POTASH.

By E. E. SOMERMEIER.

Chemist Ohio State University, Columbus, Ohio.

Potash is essential to vigorous plant growth, and complete plant nutrition requires the presence in the soil of potash in a form readily soluble in water and hence in a form available for the use of the plant.

HOW IS AMOUNT OF POTASSIUM PRESENT IN A FERTILIZER ESTIMATED?

The common soluble salts of potassium are potassium chloride, potassium sulphate and potassium carbonate. In estimating the amount of potassium present in a fertilizer it is customary to estimate it as being present in the form of potash which is the oxide (K_2O) and which contains about 83 per cent. of actual potassium. In estimating the amount of potash equivalent to potassium in different forms the following values are convenient:

VALUES.

- (a) One hundred parts of potassium chloride contain the equivalent of 63.1 parts of potash or the equivalent of 52.5 parts of potassium.
- (b) One hundred parts of potassium sulphate contain the equivalent of 54.0 parts of potash or the equivalent of 48.8 parts of potassium.
- (c) One hundred parts of potassium carbonate contain the equivalent of 68.1 parts of potash or the equivalent of 56.5 parts of potassium.

WHERE IS POTASH FOUND?

Potash is a constituent of many common rocks and minerals, and most soils contain an abundance of potash which however is in many cases practically wholly in an insoluble form and hence of little or no value in plant growth. Ordinary granite often contains several per cent. of potash in the form of feldspar, an insoluble compound of potash, alumina and silica. Feldspars and rocks containing considerable percentages of potash are very common in various portions of the mountainous regions of the United States. In the aggregate these rocks contain the equivalent of many millions of tons of potash which however from an agricultural standpoint is practically worthless, as the decomposition of such rocks by weathering is so slow (requiring very many thousands of years) that the amount of potash which becomes available during the life of the plant is practically infinitesimal.

WHY DOES THE GERMAN GOVERNMENT PRACTICALLY CONTROL THE POTASH SITUATION?

Deposits of the soluble compounds of potash, the compounds valuable for agricultural purposes, are limited to comparatively few regions, and at the present time the main and in fact the only commercially developed deposits of potassium salts are found in Germany. The German government has a monopoly of the potash production, and all potash imported into this country is subject to a tax. The annual importation of potassium salts into this country is in the neighborhood of 1,200,000 tons, of an average potash content equivalent to 25 per cent. of potassium chloride or equivalent to 300,000 tons of pure potassium chloride. Every pound of this product is taxed by the German Government, which tax is of course indirectly paid by the American farmer who uses the fertilizer. The amount of tax which the German government can levy upon potash compounds is limited merely by what that government thinks it can safely apply without seriously interfering with the sales of the material or without bringing into existence methods and means for obtaining a supply of potash from other sources. This condition of being practically at the mercy of the German government is not pleasant, either for the American farmer or for the United States government, and numerous plans and investigations have been considered and undertaken both by private individuals and by the United States government, looking toward the obtaining of a potash supply from sources which would make this country independent of the German supply. At least three sources are possible.

WHAT SOURCES AT OUR COMMAND TO OBTAIN SUPPLIES OF POTASH IN THIS COUNTRY?

- (1) Chemical treatment of the insoluble compounds of potash and the conversion of this potash into a soluble form.
- (2) Discovery and development of the deposits of soluble potash compounds in the desert regions of the western part of the United States.
- (3) Recovery of potash from sea weeds.

WHAT MATERIALS NOW CONTAIN INSOLUBLE COMPOUNDS OF POTASH?

The obtaining of potash by chemical treatment of feldspars and rocks containing high percentages of potash is entirely feasible and the supply of raw material practically inexhaustible. The only problem, but is an important one, is to be able to produce the potash at a price low enough to compete with the price of the German supply. At the present time no commercial plants are in operation, but many well in-

formed authorities express a faith in the ultimate commercial success of the method and believe that much of the potash in the coming century will be obtained in this way.

HAVE WE DEPOSITS OF SOLUBLE POTASH IN THE UNITED STATES?

Considerable deposits of potassium salts have already been discovered in the western part of the United States. At Searles Lake, California, a deposit estimated to contain from four to ten million tons of potash is being developed at the present time and doubtless new deposits will be discovered and developed in the near future.

WILL SEA WEEDS AFFORD ADEQUATE SUPPLY OF POTASH FOR ALL COMMERCIAL NEEDS?

The recovery of potash from sea weeds apparently affords the possibility of a supply adequate for all commercial needs. Off the coast of Southern California are extensive beds or groves of giant sea weed or kelp which when dried contains about 25 per cent of potassium chloride. The extent of these kelp beds or groves has already been determined as being sufficient to supply on a conservative estimate an annual production of one million tons of potassium chloride or upwards of three times the amount annually used at present. This obtaining of potash from sea weed like the obtaining of potash from feldspar appears to be merely a question of being able to do so at a price which will make it commercially profitable. According to F. K. Cameron of the United States Department of Agriculture, a ton of dried kelp based on present values is worth about \$10.50. The estimated cost of harvesting and drying a ton of kelp if done on a commercial scale is estimated at \$2.70, leaving a margin of \$7.80 per ton to cover freight charges, cost of sacking, profit, etc., from which it appears that the early development of this industry on a commercial scale may reasonably be expected.

SUMMARY.

Briefly summarized, the present potash condition is about as follows: The American farmer is dependent upon the German supply of potash. This supply is subject to a tax by the German government, which tax is paid by the farmers of the United States. Several other sources of supply are possible, and the possibility and probability of their development serves to limit the amount of tax which the German government can safely levy, and while this country for some years to come will undoubtedly pay tax on the bulk of the potash used, it does not appear that

¹Journal of Industrial and Engineering Chemistry, Vol. 4, p. 690.

the tax will ever become so great as to make the price prohibitive, and the development of other sources of supply will undoubtedly enable the American farmer of the future to obtain potash on terms comparable with present prices.

THE NITROGEN OF THE FERTILIZER SACK.

BY CHAS. E. THORNE,

Director Ohio Experimental Station.

Three principal carriers of nitrogen are employed for the fertilization of the soil, namely: (1) Nitrates, a class hitherto represented by nitrate of soda, but which has recently been re-enforced by nitrate of lime and similar products formed by the electrical combination of the three nitrogen and oxygen of the atmosphere; (2) Ammonia salts, represented by sulphate of ammonia, and (3) organic nitrogen, including all forms of animal and vegetable refuse containing nitrogen, such as bone meal, dried blood, tankage and other slaughterhouse products, the various oilmeals, dried muck or peat, etc.

PLANT FOOD MUST BE DISSOLVED IN WATER.

The food of the plant must be dissolved in water before it can serve its purpose, for no solid substance can pass through the cell walls of living tissue, and the plant has no means of taking its food into an internal reservoir, and there dissolving it as does the animal. Consequently those carriers of nitrogen which enter into solution most readily are found most effective, and these include, first, such salts as nitrate of soda and sulphate of ammonia, and second, the more easily soluble animal and vegetable carriers, such as dried blood and the oilmeals, substances which decay quickly and thus become soluble.

When applied to the soil in soluble form, however, the nitrogen must be used at once, else it will be carried away in the drainage waters; hence the provision of Nature that the great store of organic nitrogen in the soil—an acre of ordinary soil containing from one ton to several tons of nitrogen in the upper foot, and an acre of muck or peat ten to twelve tons or more—shall be held in a practically insoluble form, from which it is slowly made available by the action of the soil bacteria, which convert it first into ammonia and then change this ammonia into the nitrate form.

INERT PLANT FOOD.

We tan the skins of animals in order to preserve them from decay, and the principle which gives them this property is derived from bark. In peat bogs we find a similar principle at work, and the vegetable debris which constitutes these bogs, although rich in nitrogen, yet decays so slowly that it is practically worthless as a source of fertilizer nitrogen until so treated as to convert it into soluble form. A ton of dried peat may carry 40 to 50 pounds of nitrogen, and if this nitrogen is sold at the price which is asked for the nitrogen of the average fertilizer sack—20 cents or more per pound—the purchaser will pay a high price for something of very doubtful value. And what is true of peat is especially true of leather meal, wool waste, hair, etc., materials which in their untreated condition decay with extreme slowness, and upon which the effect of treatment has not yet been thoroughly investigated.

COMPARISON OF SOME EFFECTIVE CARRIERS OF NITROGEN.

As showing the wide variation in effectiveness between nitrate of soda and some other carriers of nitrogen, I give below the results of comparisons made by the Pennsylvania and Ohio experiment stations and extending over 25 years at the former station and 15 years at the latter. The table giving the total value per acre for one rotation of the increase due to the nitrogen alone, as found by deducting from the produce of a complete fertilizer, containing nitrogen, phosphorus and potassium, that of a fertilizer containing phosphorus and potassium but no nitrogen. The cropping at the Pennsylvania station was a 4-year rotation of corn, oats, wheat and clover, and that at the Ohio station was a 5-year rotation of corn, oats, wheat, clover and timothy.

Carrier of Nitrogen.	Annual value per acre of increase from nitrogen.	
	Pennsylvania.	Ohio.
Nitrate of soda.....	\$2 08	\$2 54
Sulphate of ammonia.....	1 13	1 42
Dried blood.....	1 23	1 56
Linseed oil meal.....	---	1 83
Tankage.....	---	1 59

SLAUGHTERHOUSE NITROGEN.

The various slaughterhouse materials include dried blood, tankage, which is the residue left when the grease is extracted from scraps of meat—what is known to the farm housewife as “cracklings”—and which is dried and ground into meal; bonemeal in various forms, from that ground raw to that from which the nitrogenous matter has largely been extracted by steaming; hoof meal and horn meal. These materials vary

in composition, from dried blood, containing from 12 to 13 per cent. nitrogen with a trace of phosphorus, to a steamed bone meal, containing less than one per cent. nitrogen with 25 to 30 per cent. phosphoric acid. The tankages run from as high as "10 and 10," meaning 10 per cent. "ammonia" and 10 per cent. "bone phosphate" (the compound of phosphorus and lime found in bones, and consisting of about 44 per cent. phosphoric acid and 56 per cent. of lime) to "9 and 20," "8 and 20," "7 and 30," "6 and 35," etc. Raw bone meal contains 4 to 5 per cent. "ammonia" with 20 to 24 per cent. "phosphoric acid" (or 45 to 55 per cent. "bone phosphate") while steamed bone meal runs from 1 per cent or less to $2\frac{1}{2}$ per cent. ammonia and 25 to 30 per cent. phosphoric acid. These materials are collectively called "ammoniates" in the fertilizer trade, a term, however, which may extend to other substances containing nitrogen.

Dried blood, the tankages and bone meals are useful carriers of nitrogen, although somewhat slower in action than nitrate of soda and sulphate of ammonia, which are easily soluble salts, ready for immediate work. Sulphate of ammonia increases the tendency to soil activity. When the land has been limed the increase from sulphate of ammonia is nearly or quite as great as that from nitrate of soda.

MATERIALS COMMONLY USED AS CARRIERS OF NITROGEN.

Nitrate of soda and sulphate of ammonia are seldom if ever used in the mixed fertilizers sold in Ohio, because nitrogen can be purchased in the slaughterhouse materials above described and in muck or peat for much less money. Repeated experiments have shown that the nitrogen in blood, bone and tankage is fairly available if sufficient time be given for decay to take place in the soil. Horn and hoof meals, however, decay more slowly than blood or tankage, and hair, wool and leather very much more slowly still, hence the use of these materials lowers the value of the fertilizer.

NITROGEN OF THE SOIL.

All soils contain more or less nitrogen, carried in decaying roots and animal remains. When this decay has progressed to a certain point a black substance called humus is formed, which serves as a reservoir or storage battery, in which the nitrogen is held in a comparatively stable form. In order that the nitrogen of humus may become available it must be subjected to the action of air and of the organisms working in the soil which produce the effect called nitrification. That humus may be a very inert carrier of nitrogen is shown in the fact that soils may show by analysis a ton or more of nitrogen per acre in the upper 12 inches, and yet be so starved for nitrogen that a few pounds of this ele-

ment carried in nitrate of soda may make a difference of several bushels per acre in the crop. For example, in the 5-year rotation at the Ohio Experiment Station, Plot 8, receiving phosphorus and potassium but no nitrogen, has given a 17-year average of 20 bushels of wheat per acre while Plot 11, receiving the same quantities of phosphorus and potassium, in the same carriers, with 25 pounds of nitrogen added in nitrate of soda, has yielded an average of 27 bushels for the same period; yet there is a ton of humus nitrogen per acre in the upper 6 inches of this land. Farmers, therefore, should not be deceived by a fertilizer agent's claim that this particular brand of fertilizer is especially effective because its "ammonia" is in the natural "humus" form. The probability is that it will prove less effective, instead of more so.

MUCK AND PEAT AS CARRIERS OF NITROGEN.

The Ohio muck and peat deposits contain millions of tons of material, which, when dried, will analyze 2 to 3 per cent. nitrogen; just as the phosphate beds of Tennessee contain millions of tons of rock containing phosphorus; but the nitrogen of the Ohio peat beds and the phosphorus of the Tennessee rocks are locked up in insoluble combinations from which they must be set free by chemical treatment before they can be utilized by growing crops.

The following quotation is from "Soil Fertility and Permanent Agriculture," by Dr. C. G. Hopkins, Chemist of the Illinois Experiment Station, than whom there is no better authority on soil fertilization:

"Train loads of dried peat are shipped from the peat beds of Illinois and elsewhere to the fertilizer factories for use as a filler; and as a filler it is said to be superior to all other materials, because it is a very effective absorbent and thus keeps the acidulated fertilizers in excellent mechanical condition. Dried peat contains from 3 to 4 per cent. of nitrogen which may be "found" by analysis, although the nitrogen in peat is at best no more active than that in the ordinary organic matter of the soil, which usually amounts to 3,000 to 4,000 pounds per acre in the plowed soil, so that 50 pounds of peat in 200 pounds of 'complete' fertilizer would not appreciably affect the crop."

Chemistry has given us certain tests by which we may determine whether the phosphorus of the fertilizer sack is available to plants, and chemists are hunting for a test by which they may similarly determine the availability of fertilizer nitrogen. Until such a test is discovered farmers should insist upon knowing whether the nitrogen in the fertilizer sack is carried in substances which have been found to yield their nitrogen generously to the plant, or whether the carrier of nitrogen is one which is notoriously stingy.

WHAT IS LIME ?

An Elementary Lesson in Chemistry.

BY CHAS. E. THORNE,

Director Ohio Experiment Station.

Everyone who has handled a lump of quicklime has noticed that it is much lighter in weight than an unburnt limestone of equal bulk. This means that one of the materials of which the original stone was composed has been driven off from the stone by the burning, and has escaped as an invisible gas into the atmosphere. This gas is carbon dioxide (di—meaning two) the “carbonic acid gas” of the older chemistry. It is the same gas which is breathed out of the lungs, and if we pass our breath through a tube into the bottom of a tumbler of limewater a white cloud will be formed by the union of the carbon dioxide of the breath with the lime dissolved in the water, thus reversing the results attained by burning; for the white cloud in the tumbler and the limestone in the quarry are both the same substance, namely; carbonate of lime.

If we first thoroughly dry a pure limestone and then burn it, we shall find that it has lost about 44% of its original dry weight. That is, 100 pounds of pure, dry limestone, or carbonate of lime, will produce about 56 pounds of lime. But what is lime?

CALCIUM.

The chemist is able to separate the burnt lime into two constituents, one of which again is the oxygen gas which constitutes about one-fifth of the air we breathe, while the other is a brilliant, light yellow metal called calcium, which rapidly tarnishes when exposed to moist air by recombining with oxygen and lime. This elementary metal, calcium, is the essential constituent to which lime owes its peculiar properties. Oxygen and carbonic acid may be formed in thousands of other combinations which have none of the characteristics of lime and perform none of its functions. We use lime, therefore, simply as a convenient carrier of calcium.

HYDRATED LIME.

If we expose a lump of freshly burnt lime to ordinary moist air, in the course of a few days, or weeks, depending largely upon the amount of moisture in the air, it will be found to have crumbled into a fine

powder. In other words, it is air slaked. We may accomplish this result much more quickly by pouring water on the lump of lime, when it will fall to powder before our eyes, and with the evolution of considerable heat, thus showing that a chemical operation has taken place, in which the water has become chemically combined with the lime; for, unless excess of water has been used, this powder will be just as dry to our senses as the original quicklime. This combination of lime with water is called hydrated lime, and if we weigh the powder resulting from either air slaking or water slaking we will find it to be about one-third heavier than the original quicklime from which it was produced, this additional weight being due to chemically combined water.

ATOMIC WEIGHTS.

Chemists have found that elementary substances, such as calcium, carbon, oxygen and hydrogen always combine with each other in certain fixed weights, or multiples of such weights, which are called atomic weights, or combining weights; and hydrogen, which is the gas which causes balloons to rise, and is the lightest of known elements, is taken as the unit of weight. (The reason balloons rise is that hydrogen is lighter than air, not that hydrogen has no weight of itself; just as wood floats upon water because it is lighter than water. If hydrogen be placed in a vacuum it will fall, instead of rising, just as wood falls in air.)

Measured by hydrogen as unity, the other elements which enter into the composition of lime in its various forms have the following atomic weights:

Calcium (Ca).....	40
Oxygen (O).....	16
Carbon (C).....	12
Hydrogen (H).....	1

CHEMICAL SYMBOLS.

In order to save space and time each element is given a symbol to designate it, these symbols being usually the first one or two letters of the name of the element, and the symbols of the elements under consideration are as given above in parentheses. In designating chemical compounds these symbols are so used as to show not only the elements contained but the proportion of each element in the compound: Thus water, which is a chemical combination of two combining weights of hydrogen with one combining weight of oxygen, has the symbol H_2O , which means that in 18 pounds of water 2 pounds are hydrogen and 16 pounds are oxygen; but 2 is approximately 11 per cent. of 18, and 16 is about 89 per cent. of 18, so we say that water is 11 per cent. hydrogen and 89 per cent. oxygen.

The symbol for lime is CaO , meaning that 40 pounds of calcium

are combined with 16 pounds of oxygen in every total of 56 pounds; or 71 per cent. of calcium and 29 per cent. of oxygen.

The symbol for carbon di-oxide is CO_2 , meaning that one combining weight of carbon is united with two combining weights of oxygen, or 12 parts by weight of carbon with 32 parts by weight of oxygen, so that this gas is a little more than 27 per cent. carbon and a little less than 73 per cent. oxygen.

In carbonate of lime we have three elements to consider; calcium, carbon and oxygen, and the symbol of this compound is CaO , CO_2 , or CaCO_3 , so that in a given weight of pure limestone we would have for every 4, pounds of calcium 12 pounds of carbon and 48 pounds of oxygen. The sum of these weights is just 100, so that 100 pounds of carbonate of lime contain 40 per cent. calcium, 12 per cent. carbon and 48 per cent. oxygen.

Hydrated lime has the symbol CaO , H_2O , or CaH_2O_2 , so that in a given weight of hydrated lime the elements would have the ratio 40:2:32, or 54 per cent. calcium, 2.7 per cent. hydrogen and 43.3 per cent oxygen.

RELATIVE VALUE OF CALCIUM CARRIERS.

Now let us see how much actual calcium we shall find in a ton of each of the different carriers mentioned:

Carrier.	Symbol.	Percentage Composition.				Pounds calcium in 1 ton.
		Ca.	O.	C.	H.	
Quicklime.....	CaO	71	29	-----	-----	1,420
Hydrated lime.....	CaO , H_2O	54	43.4	-----	2.7	1,080
Carbonate of lime.....	CaO , CO_2	40	48	12	-----	800

One ton of quicklime carries 1,420 pounds of calcium. To carry this quantity of calcium in hydrated lime would require as many hundred pounds of hydrated lime as 54, the quantity of calcium contained in 100 pounds of hydrated lime, is contained in 1,420, which is 26.3: It will therefore take 2,630 pounds of hydrated lime to carry as much calcium as is found in 2,000 pounds of quicklime. In the same way it is shown that 3,550 pounds, or nearly 2 tons, of carbonate of lime will be required to carry the calcium found in one ton of quicklime.

THE CARBONATES OF LIME.

Three forms of carbonate of lime are on the market; one produced by grinding raw limestone, one found in the beds of marl sometimes found under muck beds, and one resulting from manufacturing processes in which the carbonate is produced by chemical processes analogous to that which is witnessed when we breathe through a tube into a glass of limewater. This process, by which the carbonate of lime is precipitated, to use the chemist's term, results in a much finer powder than can be produced by ordinary grinding, and hence a precipitated carbonate of lime may be more quickly available than ground limestone. In actual practice, however, the experiments made by the Ohio Experiment Station have shown no practical superiority of one form of lime over the other, provided the limestone has been so ground that 80 per cent. of it will pass through a sieve having 100 meshes to the lineal inch, and provided also, of course, that the two materials are used on the basis of the actual calcium contained. As the outcome of these experiments the Experiment Station is using either one ton of quicklime or two tons of ground limestone per acre, whichever can be spread on the field in these quantities for the least money.

To illustrate this point, let us suppose that ground limestone and quicklime are offered at the same point of shipment at \$1.25 per ton for the former and \$5.00 for the latter. Let us assume that the freight will be \$1.50 per ton, and the cost of hauling from the car and spreading \$1.00 per ton. On account will then stand as follows:

	Quicklime. 1 ton.	Ground Stone. 2 tons.
Cost at point of shipment.....	\$5 00	\$2 50
Freight.....	1 50	3 00
Hauling and spreading.....	1 00	2 00
Total.....	\$7 50	\$7 50

ADULTERATED LIMES.

A factor which is not taken into the above account is the greater discomfort in handling the quicklime than the ground stone. Moreover, sometimes, the so-called "agricultural lime" is suspected to contain more or less unburnt stone, ashes, etc., accumulating at the bottom of the kiln, which are ground up together. Such lime, of course, would not be pure quicklime, and a very little adulteration of this sort would bring the value of the one ton of "agricultural lime" much below that of the two tons of limestone. On the other hand, the ground stone is not always so finely ground as it ought to be to produce the best results, and it may sometimes be ground from rock containing sand or earth,

although this probably is seldom the case, for when a product is worth only about a dollar per ton there is less inducement to adulterate it than when the price is higher.

MAGNESIA.

Magnesia (MgO) is the oxide of the element magnesium, which is very similar in its characteristics to calcium, and the two are generally found associated in ordinary limestones. Magnesium has a somewhat greater effect than calcium in correcting acidity, 84 pounds of magnesium carbonate being equivalent in this respect to 100 pounds of calcium carbonate. Within certain limits the presence of magnesium in the limestone, therefore, is an advantage; but when used in excess magnesium may cause injury rather than benefit—which is also true of calcium, or any other good thing. The difference between magnesium and calcium in this respect is that it requires a smaller amount of the former than of the latter to cause injury. Such injury is more liable to follow the use of a magnesian lime, carrying magnesia in the caustic form, than when the carrier is in the carbonate form.

When the limestone carries nearly as much magnesium as calcium it is called a dolomite, and the use of quicklime made from such a stone would be questionable; when, however, the magnesia does not reach more than 25 to 30 per cent. in the lime there is but little danger of injury from it on ordinary Ohio soils, if applied at the usual rate of about a ton to the acre once in 4 or 5 years. There is but little danger from magnesia in the carbonate form.

THE ONE THING TO REMEMBER ABOUT LIME.

The one thing to remember about lime is that it is the natural calcium and magnesium carbonate which we find in limestone that does the work we want done in the soil, whether in feeding the plant or in neutralizing soil acidity, and that whatever be the carrier we may use, whether quicklime or hydrated lime, it will be quickly changed to the carbonate by the moisture and carbon di-oxide of the soil, and that the only reasons for using any other carrier than the natural carbonates are to secure the greatest fineness of division and to save freight and labor in handling.

WHEN TO USE LIME.

Half the soils of Ohio—covering the region west of a line drawn from Sandusky through Columbus to the west line of Scioto county excepting Williams and Fulton counties and adjoining portions of Henry and Defiance counties—lie over limestones. In this region there may be

old fields in which the supply of lime in the plowed surface has become deficient, but as a rule the expense of a general application of lime should not be incurred until a preliminary test has been made. Such a test is best made by liming a narrow strip across a field and observing the effect on the clover crop. For such an experiment common hydrated or builder's lime may be used at the rate of 15 to 20 pounds per square rod, or 2,000 to 3,000 pounds per acre.

At the Experiment Station the best results have followed when the lime has been applied to the surface while the land was being prepared for corn, the cultivation of the corn crop and the subsequent plowings mixing the lime through the seed bed so thoroughly that when the clover crop has come along in its regular place in the rotation it has found the soil acidity thoroughly corrected.

LITMUS TEST.

The litmus test is a simple chemical test for soil acidity, made by inserting a strip of blue litmus paper in moist soil and letting it stand for a few minutes. If the soil is acid, the paper will turn distinctly red. As the paper may sometimes be reddened by temporary conditions of acidity the actual application of lime as above described is much the better test.

When lime is needed it should be applied in sufficient quantity to accomplish its work. At the Experiment Station the rule is to apply one ton of quicklime, $1\frac{1}{2}$ ton of hydrated lime, or two tons of carbonate of lime per acre as a first application, this to be followed every four or five years thereafter—or every time the corn crop comes around in rotation by half the above quantities.

Lime cannot be satisfactorily applied with the ordinary fertilizer drill, as it does not sow enough and will not feed slaked lime regularly. Several good lime spreaders are now on the market.

While, as above stated, the need for lime is doubtful over the western half of the state, the case is very different over a large part of eastern Ohio, where the rock floor is made up of shales and sandstones. At the Experiment Station lime is adding eight to ten bushels of corn to the acre, two or three bushels each of oats and wheat, and is more than doubling the clover crop.

It is to be hoped that the Secretary of Agriculture will be authorized by law to extend to the trade in agricultural lime the same control now exercised over that in fertilizing materials.

SOIL ELEMENT DEFICIENCY

This is the age of scientific farming. The farmer who proceeds scientifically keeps his soil built up to its maximum productivity. To do

this he must know the cause for deterioration, what the soil contains and what it lacks, and what crop they are by nature best suited for. The Experiment Station at Wooster will co-operate and advise elements of which soils are most deficient. Below are given some general principles that all will do well to remember.

CLAY SOILS are generally deficient in nitrogen and phosphorus, but contain potassium. The tendency is for clay soils to bake and get hard and the addition of a little lime is calculated to correct this.

BLACK SOILS are strong in nitrogen, but sometimes short of phosphorus and potassium. Such soils usually need drainage.

SANDY SOILS are generally deficient in potassium. Roughly speaking they are short on all the soil elements. Here is another case where lime will prove a sweetener and will help to retain moisture.

USE OF FERTILIZERS.

BY N. W. LORD.

Commercial fertilizers contain practically nothing of value but phosphoric acid, ammonia and potash. These substances have a regular commercial price like sugar or iron. They are present in all fertile soils in small amounts. In many soils one or more of them are not present in sufficient amount to give good crops.

Fertilizers are added to supply these deficiencies. It is a waste of money to purchase and add to the soil any of these materials already present in sufficient amount. Certain crops need an extra quantity of one or more of them. Fertilizers will not take the place of proper cultivation. Fertilizers will not take the place of humus or organic matter in the soil.

AMMONIA

Is the most expensive by far of the three essentials. Ammonia can also be supplied to the soil by proper use of clover, cow peas, soy beans and other similar crops. These plants get it from the air. Ammonia can be supplied by manure. Ammonia should only be purchased where farm sources are not properly available. Good farming in part consists in preserving and increasing the natural sources of ammonia on the farm by the use of manure and proper plants in rotation.

PHOSPHORIC ACID

Is needed on most Ohio soils. The amount in the soil cannot be increased by cropping. It usually pays to purchase it. It is especially

needed by grain crops. Barnyard manure contains too little phosphoric acid. Its value is greatly increased by adding phosphate to it. Insoluble phosphoric acid like that in raw rock is made available to a considerable extent when mixed with manure, but it is not available alone.

POTASH

Is taken from the soil by hay and straw more than by grain. It is not naturally deficient in most Ohio soils. It is particularly needed by some crops like potatoes and tobacco. Some dark "mucky" soils need it naturally. Selling straw, hay and fodder tends to exhaust the potash from soils.

WORN-OUT SOILS.

In building up worn-out soils complete fertilizers may be needed at first to get crops started, but the continued use of them when not accompanied by return of organic matter to the soil by manure or clover will leave the land in worse shape than in the beginning.

"LOOKS" OF PLANT.

The "looks" of the plants will often indicate what is lacking. Ammonia promotes growth, and weak plants and light green foliage often grow with lack of it, provided other conditions are right for growth. Lack of phosphoric acid and potash will sometimes show in character of grain as well as yield. Continued use of superphosphate (acid rock) tends to soil acidity. This can be corrected by lime or ground limestone.

SOIL ANALYSIS NOT A SUFFICIENT GUIDE TO THE USE OF FERTILIZERS.

BY CHAS. E. THORNE,

Director Ohio Experiment Station.

Sand is pulverized rock, and clay is merely sand, reduced to an impalpable powder. The soil consists of sand and clay, mixed with the remains of the plant and animal life which have grown upon it during past ages, the rocks from which the sand and clay were derived constituting the original storehouse from which have been drawn the phosphorus, potassium and lime which our crops require for their growth.

WHAT MUST HAPPEN TO ELEMENTS BEFORE PLANT CAN MAKE USE OF THEM?

These elements must be dissolved in water before the plant can make use of them, for it has no stomach in which to store solid food, there to

be dissolved by its own secretions. But if they had been easily dissolved they would have been washed out of the land and carried to the sea ages before man came to inhabit the earth; hence they have been stored in the particles of sand and clay, from which they are given up, little by little, under the influence of each season's sunshine and rain. It is not, therefore, the total store of plant food in a soil which determines its productiveness, but the amount of that store which may be made available from day to day during each season's growth.

To illustrate: Orthoclase feldspar contains nearly 14 per cent of potassium, or nearly three times as much as wood ashes, but this potassium is held so firmly that feldspar has never been made a source of the potash used in human industry, urgent as is the demand for a cheaper source of it. Clay is largely derived from feldspar, and we find 18 to 20 tons or more of potassium per acre in the upper foot of most Ohio soils, yet at the Germantown Test Farm of the Ohio Experiment Station the addition of 40 pounds of potash per acre, at a cost of \$2.00, to a dressing of acid phosphate has increased the value of the yield by \$4.62 over that produced by the acid phosphate alone, as an 8-year average in a 3-year rotation of corn, wheat and clover.

DOES PLANT DISCOVER LACK OF FOOD BEFORE IT IS REVEALED
BY CHEMICAL ANALYSIS?

There are about 2,000,000 pounds of earth in the upper seven inches of an acre of soil, so that 40 pounds of material distributed through the plowed surface of one acre would give one pound to 50,000 pounds, or 25 tons, of soil. To detect so small an amount requires chemical manipulation of the most accurate description; and while chemical methods are now able to closely approach such accuracy as would be required in this case, yet, after all, the plant has methods of separating its food from the minerals of the soil, the secret of which the chemist has not yet fully uncovered, so that the most the chemist can do for us in this matter is to detect the larger differences which are found in extreme cases. In other words, the plant discovers a lack of food long before it is revealed by chemical analysis.

DOES EXPERIMENT STATION DETERMINE FERTILIZER REQUIREMENTS OF SOIL
BY CHEMICAL ANALYSIS?

For this reason the Experiment Station does not attempt to determine the fertilizer requirements of a soil by chemical analysis. However, the knowledge of the different soils of the state which the station has obtained through its soil survey and through its field experiments,

located as they are on soils of different types throughout the state, enables it to offer advice which may be followed in the assurance that it will lead to a profitable use of fertilizing materials.

In order that it may offer such advice intelligently the Station should have information respecting the locality of the particular soil, its condition as to drainage, the original forest growth, whether the land is sandy or gravelly, black or light colored, and the system of cropping and of manuring or fertilizing to which it has been subjected.

THE PHOSPHORIC ACID IN PHOSPHATE SLAG

By N. W. LORD.

The material known as basic slag or Thomas phosphate powder or basic slag phosphate is a by-product obtained in the manufacture of certain kinds of material. It contains a large percentage of phosphoric acid and is a valuable fertilizer.

The phosphoric acid in basic slag is in a different kind of combination from that in rock phosphate or in any of the acid phosphates obtained from the rock phosphate by treatment with acid. These Thomas phosphates contain a large excess of lime instead of free acid. It has been shown by experiment that nearly all of the phosphoric acid in these basic slags is available for the plant in the course of time when put into the soil, but owing to the peculiar character of the combinations the phosphoric acid is not dissolved by the ammonium citrate solution used in the official method of determining the availability of phosphoric acid in the ordinary fertilizers on the market. For this reason the phosphate slag is graded by its total content of phosphoric acid and unless mixed with other phosphatic materials does not have its phosphoric acid classified as available and insoluble, the reason for this being that while the phosphoric acid is available, its availability is different and cannot be expressed in the same standard.

In purchasing basic slag the farmer is protected if he obtains the percentage of total phosphoric acid for which he contracts as he is buying a different material from the ordinary acid fertilizer and one in which all the phosphoric acid has a certain availability. The only requirement the farmer should insist upon other than the total phosphoric acid is that the material be very finely ground.

It is not deemed advisable to use the term "available phosphoric acid" for results obtained by a special method (The Wagner Method), as such results are not comparable with the available phosphoric acid as determined by the ordinary official method and the use of the term is therefore misleading.

VALUATIONS OF COMMERCIAL FERTILIZERS.

(N. B.—Please preserve this article.)
Not for use in 1913.

The valuations attached to fertilizer analyses are intended to represent the cost of the phosphoric acid, potash and ammonia they contain, delivered at Columbus in the raw materials furnishing them plus an allowance of 25 per cent. to cover the mixing of the material and the profit of the manufacturer. Sacking or bagging is not included. This item will mean an additional cost of from \$1.50 to \$1.80 a ton. The cost of the fertilizer elements in the crude materials is estimated as follows: To the average wholesale price for the season as obtained from trade quotations at Chicago and New York, is added the freight for a carload lot to Columbus. From the prices so obtained the cost of a unit of the material is figured by dividing the cost by the number of units or per cents. which the material contains. This gives the cost per unit at Columbus.

One unit is one per cent. of one ton, or twenty pounds of the substance. Where several materials are used the average price per unit is taken as the basis of valuation. In fixing the valuation to be used in the calculation of the values of mixed fertilizers, 25 per cent. is added to this cost for profit, mixing and distribution.

AMMONIA.

In obtaining the following values, the nitrate of soda f. o. b. New York was taken at \$2.16 a hundred pounds. Dried blood at \$3.04 per unit f. o. b. Chicago, and tankage at \$2.71 per unit ammonia and ten cents per unit bone phosphate. These give the average cost of ammonia at \$2.90 per unit f. o. b. Columbus. Rock phosphate, basis of 14 per cent. available, New York rate 57 cents a unit, is equivalent to 85 cents per unit f. o. b. Columbus.

POTASH.

Sulphate of potash, 90% basis. This would contain 48.7 per cent. actual potash. New York quotations \$2.25 per hundred. Cost per unit in Columbus of actual potash \$1.01.

Muriate of potash, basis 80 per cent., New York quotations \$1.85 per hundred. Actual potash in 80 per cent. muriate 50.5 per cent. Cost per unit f. o. b. Columbus 81 cents.

PHOSPHORIC ACID.

The cost of phosphoric acid in bone was estimated as follows The ground bone, f. o. b. Columbus, on the basis of four per cent. am-

monia and 50 per cent. bone phosphate was taken at \$23.75. Calculating the ammonia at \$2.90 a unit leaves \$12.15 for the phosphoric acid. Fifty per cent. bone phosphate is equivalent to 22.9 per cent. phosphoric acid. This would make the phosphoric acid in bone 53 cents a unit.

The value of the phosphoric acid in bone increases with the fineness. In computing the values of bones a difference of 25 per cent. is made between the phosphoric acid in fine bone and the phosphoric acid in medium bone. Adjusting this to an average of 70 per cent. fine gives for the phosphoric acid in medium bone 43 cents per unit and for fine bone 57 cents per unit.

Where acidulated goods are derived wholly from animal matter, it is assumed that the insoluble acid has the same value as that in medium bone. Where goods consist of mixed animal and mineral matter the insoluble acid is valued at one-half the price of medium bone.

Adding to the foregoing values 25 per cent. we have the following table of valuations:

	Cost of raw material per unit.	With 25% added cost in mixed goods.	Value per pound, cents.
Ammonia.....	\$2 90	\$3 62	18.1
Available phosphoric acid.....	85	1 06	5.3
Actual potash in sulphate, or carbonate.....	1 01	1 26	6.3
Actual potash in muriate.....	81	1 01	5.1
Phosphoric acid in fine bone.....	57	71	3.6
Phosphoric acid in medium bone.....	43	54	2.7
Insoluble phosphoric acid in animal and mineral mixture.....	22	27	1.3

To the value of the fertilizer calculated from these figures, the cost of sacking should be added, amounting to \$1.60 a ton.

VALUATION TABLE USED FOR BRANDS OF COMMERCIAL FERTILIZERS LICENSED DURING 1812.

NOTE.—“Unit” is a trade expression. “Unit” equals twenty pounds commercial fertilizer ingredients. “Unit” means one per centum of a ton. For example: For market quotations ammonia is priced at 18.1 cents per pound. Then twenty times 18.1 cents gives price of a “unit” at \$3.62.

In Table No. 1, which follows, the valuation of mixed fertilizers including acid rock and potash, also bone treated with acid or mixed

with rock, or in some other way altered from pure bone, are given, based on the following prices per pound and per unit for the ingredients named.

Pure untreated bone in Table 2. Treated or altered bone in Table 1

TABLE NO. 1—MIXED FERTILIZERS.

Ammonia 18.1 cents per pound, or \$3.62 per unit.
 Available phosphoric acid, 5.3 cents per pound or \$1.06 per unit.
 Insoluble phosphoric acid, wholly mineral, no value.
 Insoluble phosphoric acid, in mixed animal and mineral, 1.3 cents per pound,
 or 27 cents per unit.
 Insoluble phosphoric acid in bone, 2.7 cents per pound or 54 cents per unit.
 NOTE.—Where manufacturers only claim total phosphoric acid in treated bones, the calculation of value from their claims is made as in case of Bones in Table No. 2.
 Potash (actual) from sulphate 6.3 cents per pound, or \$1.26 per unit.
 Potash (actual) from muriate 5.1 cents per pound, or \$1.01 per unit.

In Table No. 2 are given values of untreated bones, which are computed from the following prices:

TABLE NO. 2—BONES.

Ammonia 18.1 cents per pound, or \$3.62 per unit.
 Phosphoric in "fine" bone, 3.6 cents per pound, or 71 cents per unit.
 Phosphoric acid in "medium" bone, 2.7 cents per pound, or 54 cents per unit.
 Total phosphoric acid in bone where "fineness" not given, 3.3 cents per pound,
 or 66 cents per unit.
 Potash, if found present, valued same as in Table No. 1.

In Table No. 3 are given values of the unmixed fertilizing materials, viz: potash salts, nitrate of soda, sulphate of ammonia, dried blood, tankage, raw rock, bone black, ashes, etc.

These materials are used in the manufacture of mixed fertilizers. The values given are calculated from the average price for these materials f. o. b. Columbus, and are as follows for the fertilizing ingredients.

TABLE NO. 3—FERTILIZING MATERIALS—UNMIXED.

Ammonia, 14.5 cents per pound, or \$2.90 per unit.
 Total phosphoric acid in bone (untreated) 2.7 cents per pound, or 53 cents per unit.
 Potash (actual) from sulphate, 5.05 cents per pound, or \$1.01 per unit.
 Potash (actual) from muriate, 4.05 cents per pound, or 81 cents per unit.
 Total phosphoric acid in raw, or untreated bone black, 1.6 cents per pound, or 31 cents per unit.

When these substances are purchased in mixed fertilizers the cost price for the fertilizing ingredients is 25 per cent. greater, not including sacking, which will amount to about \$1.60 a ton.

MARKET QUOTATIONS, 1912.

Valuation of fertilizer brands based on values of the material used at the average prices for 1911. This is not given with the guarantee that farmers can, under all conditions, purchase fertilizers at these prices, but consider it a fair guide.

Last year's standard of valuations adopted, in order that identical analyses would not show different valuations in the bulletins published. Claims of manufacturers are figured; also the amount of findings of our chemist. These are calculated on the values given in the table and will serve as ready reference, showing the difference in dollars and cents between claims and findings.

However, for those desiring to figure claims on the average market prices for 1912, we give below by month, quotations at which the various raw materials could be purchased.

March 1st.

Based on the market quotations of March 1st, 1912, the values of the different ingredients per unit of twenty pounds are as follows:

Ammonia.....	\$3.39
Available phosphoric acid.....	0.99
Actual potash from sulphate.....	1.30
Actual potash from muriate.....	1.04
Phosphoric acid in fine bone.....	0.81
Phosphoric acid in medium bone.....	0.61
Insoluble phosphoric acid in animal and mineral mixture.....	0.30

Expressed in values per pound these values are as follows:

Ammonia.....	\$0.17
Available phosphoric acid.....	0.05
Actual potash from sulphate.....	0.065
Actual potash from muriate.....	0.052
Phosphoric acid in fine bone.....	0.041
Phosphoric acid in medium bone.....	0.031
Insoluble phosphoric acid in animal and mineral mixture.....	0.015

April 1st.

Market quotations of fertilizers for April 1st as compared with those of March 1st. Price of potash and phosphate materials unchanged. Dried blood has dropped 20 cents a unit; nitrate of soda has gone up 15 cents a hundred and tankage 10 cents a unit. The increase in the value of nitrates and tankage about neutralizes the decrease in the value of dried blood, so that based on the market quotations of April 1st the values of the different ingredients are practically the same as those given for March 1st.

May 1st.

Value of fertilizer materials May 1st based on market quotations practically unchanged for phosphoric acid and potash. The market quotations of May 1st on dried blood is about fifty cents per unit lower than March 1st, while the market price of sodium nitrate has increased about 15 cents per unit over the quotations of March 1st, the increase in the price of soda partially neutralizing the decrease in the price of dried blood in so far as the value of ammonia is concerned. The net drop in the value of ammonia being about 20 cents per unit or one cent per pound. In brief, the value of fertilizer materials based on market quotations of May 1st has changed but little from those based on market quotations of March 1st, with the exception of ammonia, the value of which is about one cent per pound less than quotations of March 1st.

June 1st.

The market for fertilizer materials during May has been unusually steady and the prices for June 1st on all materials are identical with the prices for May 1st.

July 1st.

There has been only a slight change in market quotations of fertilizer materials during the month of June. Prices based on market quotations for July 1st are essentially the same as those for June 1st. (See July Bulletin.)

August 1st.

Market quotations for fertilizing materials for August 1st practically identical with prices as of July 1st.

September 1st.

Market quotations for fertilizing materials for September 1st are identical with those of August 1st with the exception of an increase of ten cents per unit in the price of dried blood and of tankage. Prices very near the same as those of March 1st, values for which were given in detail.

October 1st and November 1st.

The market for fertilizer materials during September and October has been very steady. Prices October 1st and November 1st identical with those of September 1st.

December 1st.

Market quotations on fertilizing materials at this date practically the same as valuations reported November 1st.

TABULATED ANALYSES AND VALUATIONS OF COMMERCIAL FERTILIZERS.

Samples Gathered During 1912.

All Analyses Made by Ohio State University Chemist, Columbus, Ohio. Samples Retested and Results Confirmed.

TABLE I—MIXED FERTILIZERS.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
													Total Percent.
	ALLIANCE FERTILIZER CO., THE, ALLIANCE, O.	1912.											
84	Potato and Truck Manure-----	Claimed. Found.	1.00 1.00	----- 3.62	8.00 9.46	----- 10.03	1.00 0.96	----- 0.26	9.00 10.42	8.00 7.82	----- 7.90	20.45 21.81	84
108	Gold Standard-----	Claimed. Found.	1.00 1.20	----- 4.34	8.00 9.07	----- 9.61	1.00 0.83	----- 0.22	9.00 9.90	4.00 4.70	----- 4.75	16.41 18.92	108
167	Farmers' Friend Phosphate-----	Claimed. Found.	----- -----	----- -----	14.00 13.25	16.17 16.17	1.00 1.067	----- -----	15.00 15.92	----- -----	----- -----	14.84 16.17	167
217	Complete General Crop-----	Claimed. Found.	1.00 1.15	----- 4.16	8.00 9.01	----- 9.55	1.00 0.96	----- 0.26	9.00 9.97	2.00 2.35	----- 2.37	14.39 16.34	217
395	Phosphate and Potash-----	Claimed. Found.	----- -----	----- -----	9.00 8.95	----- 9.49	1.00 1.044	----- -----	10.00 9.39	3.00 3.85	----- 3.89	12.57 13.38	395

COMMERCIAL FERTILIZERS.

491

484	Raw Bone, Phosphate and Potash-----	Claimed. Found.	2.00 2.15	7.78	6.00 12.35	8.00 13.09	14.00 19.19	3.00 2.90	20.95 25.05	484
485	Old Reliable (Corn and Wheat Special)-----	Claimed. Found.	2.00 2.45	8.87	9.00 10.03	2.00 1.98	11.00 12.01	3.00 4.32	20.35 24.39	485
AMERICAN AGRICULTURAL CHEMICAL CO., THE, CINCINNATI, O. Bowker Fertilizer Works.										
6	Bowker's Black Diamond-----	Claimed. Found.	---	---	14.00 15.74	16.68	15.50 18.17	---	14.84 16.68	6
60	Bowker's Grain and Grass Grower-----	Claimed. Found.	2.00 2.15	7.78	8.00 8.64	1.50 1.08	9.50 9.72	2.00 2.32	18.15 19.57	60
61	Bowker's High Grade Fertilizer-----	Claimed. Found.	3.00 2.85	10.32	8.00 8.56	1.50 0.90	9.50 9.46	*6.00 5.24	27.31 24.92	61
76	Bowker's Wheat and Oats Special-----	Claimed. Found.	---	---	10.00 11.13	11.80	11.50 12.85	2.00 2.26	12.62 14.08	76
77	Bowker's Potash Fertilizer-----	Claimed. Found.	---	---	10.00 10.94	11.60	11.50 12.79	5.00 5.10	15.65 16.75	77
78	Bowker's Harvest Queen-----	Claimed. Found.	1.00 1.30	4.71	8.00 9.31	1.50 0.87	9.50 10.90	2.00 2.06	14.53 17.09	78
79	Bowker's Tobacco Grower-----	Claimed. Found.	2.00 2.20	7.96	8.00 8.57	1.50 0.64	9.50 9.21	*5.00 *5.20	22.43 23.76	79
80	Bowker's 10% Manure-----	Claimed. Found.	1.00 1.25	4.53	5.00 5.76	1.50 0.96	6.50 6.72	10.00 10.78	19.43 21.79	80
130	Bowker's Sure Crop-----	Claimed. Found.	1.00 1.40	5.07	9.00 9.72	1.50 10.30	10.50 11.25	2.00 2.16	15.59 17.55	130

* From sulphate.

^r Wholly from rock.

^a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	AMERICAN AGRICULTURAL CHEMICAL CO., CINCINNATI, O.—Concluded.	1912.										
	Bowker Fertilizer Works—Concluded.											
131	Bowker's Ideal Grain Grower.....	Claimed. Found.	1.50 1.50	5.43	8.00 8.19	8.68	1.50 1.08	9.50 9.27	4.00 4.07	18.36 18.51	131	
247	Bowker's Acid Phosphate.....	Claimed. Found.	12.00 12.82	13.59	12.82	13.59	1.50 2.24	13.50 15.06	12.72 13.59	247		
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.	1912.										
62	Sugar Beet Special.....	Claimed. Found.	1.00 1.20	4.34	8.00 8.89	9.42	1.50 1.34	9.50 10.23	4.00 4.47	16.55 18.27	62	
85	High Grade Potash Manure.....	Claimed. Found.	10.00 9.79	10.38	10.00 9.79	10.38	1.50 1.72	11.50 11.51	5.00 4.81	15.65 15.24	85	
109	Ohio Vegetable Manure.....	Claimed. Found.	1.00 1.15	4.16	8.00 8.21	8.70	1.50 1.06	9.50 9.27	7.00 7.75	19.58 20.69	109	

110	Special Potash Mixture-----	Claimed. Found.	1.00 1.15	4.16	5.00 5.21	5.52	1.50 r0.64	6.50 5.85	10.00 11.03	11.14	19.43 20.82	110
213	Ground Bone-----	Claimed. Found.	3.00 3.08	11.15	12.80	13.57	7.80	20.00 20.60	---	---	24.06 28.93	213
241	Ohio Onion and Truck Manure-----	Claimed. Found.	2.00 2.05	7.42	8.00 8.44	8.95	1.50 1.21	9.50 9.65	10.00 8.54	8.63	26.23 25.33	241
327	16% Acid Phosphate-----	Claimed. Found.	---	---	16.00 16.60	17.60	r1.34	16.00 17.94	---	---	16.96 17.60	327
389	Park and Lawn Fertilizer-----	Claimed. Found.	4.00 3.90	14.12	8.00 8.37	8.87	1.50 1.02	9.50 9.39	7.00 7.15	7.22	30.44 30.49	389
Bradley's.												
66	Bradley's Complete Manure for Potatoes and Vegetables-----	Claimed. Found.	4.00 3.93	14.23	8.00 8.66	9.18	1.50 0.83	9.50 9.49	7.00 6.22	6.28	30.44 29.91	66
86	Bradley's B. D. Sea Fowl Fertilizer-----	Claimed. Found.	2.00 2.20	7.96	10.00 10.83	11.48	1.50 1.66	11.50 12.49	2.00 2.24	2.26	20.27 22.15	86
214	Bradley's Soluble Dissolved Phosphate-----	Claimed. Found.	---	---	14.00 14.71	15.59	r1.50 r1.92	15.50 16.63	---	---	14.84 15.59	214
242	Bradley's Perfection Super-Phosphate-----	Claimed. Found.	2.00 1.90	6.88	8.00 7.85	8.32	1.50 0.90	9.50 8.75	5.00 4.68	4.73	21.18 20.17	242
243	Bradley's Corn and Wheat Phosphate-----	Claimed. Found.	1.00 1.10	3.98	8.00 8.11	8.60	1.50 0.90	9.50 9.01	2.00 2.18	2.20	14.53 15.02	243
244	Bradley's Justice Brand Phosphate-----	Claimed. Found.	---	---	12.00 12.03	12.75	r1.50 r2.30	13.50 14.33	---	---	12.72 12.75	244
302	Bradley's Potato and Root Phosphate-----	Claimed. Found.	1.00 1.05	3.80	8.00 8.47	8.98	1.50 r0.96	9.50 9.43	4.00 4.03	4.07	16.55 16.85	302

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Continued.	1912.										
	Bradley's—Concluded.											
391	Bradley's Dissolved Phosphate with Potash—	Claimed.	---	---	12.00	---	11.50	13.50	4.00	---	16.76	391
		Found.	---	---	12.67	13.43	11.40	14.07	5.63	5.69	19.12	
435	Bradley's Alkaline Phosphate and Potash—	Claimed.	---	---	10.00	---	11.50	11.50	2.00	---	12.62	435
		Found.	---	---	9.96	10.56	12.56	12.52	1.79	1.81	12.37	
	Cleveland Dryer's.	1912.										
1	Cleveland Dryer's Potato, Tobacco and General Crop Fertilizer-----	Claimed.	1.00	---	8.00	---	1.50	9.50	4.00	---	16.55	1
		Found.	1.30	4.71	8.69	9.21	1.18	9.87	3.46	3.49	17.73	
2	Cleveland Dryer's XXX Phosphate and Potash	Claimed.	---	---	12.00	---	11.50	13.50	4.00	---	16.76	2
		Found.	---	---	12.54	13.29	12.23	14.77	3.64	3.68	16.97	
3	Cleveland Dryer's XXX Phosphate-----	Claimed.	---	---	14.00	---	11.50	15.50	---	---	14.84	3
		Found.	---	---	15.04	15.94	11.72	16.76	---	---	15.94	

63	Cleveland Dryer's Horsehead Phosphate-----	Claimed. Found.	-----	12.00 12.67	13.43	r1.50 r2.30	-----	13.50 14.97	-----	12.72 13.43	63
111	Cleveland Dryer's Ohio Seed Maker with Potash -----	Claimed. Found.	2.00 1.85	8.00 7.35	----- 7.79	1.50 1.02	----- 0.28	9.50 8.37	2.00 2.28	18.15 17.07	111
155	Cleveland Dryer's Phosphate Brand-----	Claimed. Found.	1.00 1.05	8.00 7.80	----- 8.27	1.50 r1.15	-----	9.50 8.95	2.00 2.68	14.53 14.78	155
253	Cleveland Dryer's Horsehead Phosphate and Potash -----	Claimed. Found.	-----	10.00 9.90	----- 10.49	r1.50 r2.17	-----	11.50 12.07	2.00 2.30	12.62 12.81	253
269	Cleveland Dryer's Forest City Buckeye Am- moniated Super-Phosphate -----	Claimed. Found.	3.00 3.15	9.00 9.46	----- 10.03	1.50 1.28	----- 0.35	10.50 10.74	2.00 1.99	22.83 23.79	269
366	Cleveland Dryer's Grass and Grain Grower-----	Claimed. Found.	2.00 2.05	10.00 10.29	----- 10.91	1.50 1.66	----- 0.45	11.50 11.95	2.00 2.93	20.27 21.74	366
Crocker's.											
64	Crocker's Potato, Hop and Tobacco Phosphate	Claimed. Found.	2.00 2.20	8.00 8.82	----- 9.35	1.50 1.02	----- 0.28	9.50 9.84	5.00 4.99	21.18 22.63	64
65	Crocker's Universal Grain Grower-----	Claimed. Found.	1.00 1.25	8.00 9.39	----- 9.95	1.50 1.28	----- 0.35	9.50 10.67	2.00 1.95	14.53 16.80	65
454	Crocker's Harvest Jewel-----	Claimed. Found.	2.00 2.35	8.00 8.24	----- 8.73	1.50 1.28	----- 0.35	9.50 9.52	2.00 2.16	18.15 19.77	454
621	Crocker's Erie Fertilizer-----	Claimed. Found.	-----	12.00 12.86	----- 13.63	r1.50 r2.49	-----	13.50 15.35	-----	12.72 13.63	621
645	Crocker's Ammoniated Wheat and Corn Phos- phate -----	Claimed. Found.	2.00 2.40	10.00 11.32	----- 12.00	1.50 1.79	-----	11.50 13.11	2.00 2.17	20.27 23.36	645

* From sulphate.

a Wholly from animal matter.

r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Continued.	1912.										
	Farmers' Union.											
1112	Farmers' Union Standard Phosphate	Claimed. Found.	2.00 2.05	7.42	8.00 8.13	8.62	1.50 1.08	9.50 9.21	2.00 2.10	2.12	18.15 18.16	112
1113	Farmers' Union Club and Grange Formula	Claimed. Found.	1.00 1.20	4.34	8.00 8.56	9.07	1.50 0.96	9.50 9.52	2.00 2.05	2.07	14.53 15.74	113
1114	Farmers' Union Dissolved Phosphate	Claimed. Found.	— —	—	14.00 14.63	15.51	1.50 1.23	15.50 16.86	— —	—	14.84 15.51	114
1115	Farmers' Union Erie Queen	Claimed. Found.	— —	—	12.00 12.22	12.95	1.50 1.36	13.50 14.58	— —	—	12.72 12.95	115
156	Farmers' Union Dissolved Phosphate and Potash	Claimed. Found.	— —	—	10.00 9.71	10.29	1.50 1.49	11.50 12.20	2.00 2.16	2.18	12.62 12.47	156
528	Farmers' Union Potato Tobacco and Truck Manure	Claimed. Found.	2.00 2.05	7.42	8.00 8.46	8.97	1.50 1.06	9.50 9.52	5.00 5.23	5.28	21.18 21.96	528

Great Eastern's.		1912.										
158	Great Eastern's High Grade Acid Phosphate and Potash	Claimed. Found.	---	---	10.00	---	r1.50	---	11.50	5.00	---	15.65
			---	---	9.60	10.18	r2.17	---	11.77	5.30	5.35	15.53
210	Great Eastern's Dissolved Acid Phosphate	Claimed. Found.	---	---	14.00	---	r1.50	---	15.50	---	---	14.84
			---	---	14.94	15.84	r1.79	---	16.73	---	---	15.84
211	Great Eastern's Vegetable, Vine and Tobacco	Claimed. Found.	2.50	---	8.00	---	1.50	---	9.50	3.00	---	20.97
			2.65	9.59	9.14	9.69	0.70	0.19	9.84	2.51	2.54	22.01
212	Great Eastern's Corn Fertilizer	Claimed. Found.	1.00	---	8.00	---	1.50	---	9.50	4.00	---	16.55
			1.15	4.16	8.24	8.73	0.90	0.24	9.14	3.39	3.42	16.55
300	Great Eastern's Unammoniated Wheat Special	Claimed. Found.	---	---	12.00	---	r1.50	---	13.50	---	---	12.72
			---	---	12.34	13.08	r2.30	---	14.64	---	---	13.08
529	Great Eastern's Wheat Special	Claimed. Found.	2.00	---	8.00	---	1.50	---	9.50	2.00	---	18.15
			1.95	7.06	8.00	8.48	1.08	0.29	9.08	2.22	2.24	18.07
530	Great Eastern's English Wheat Grower	Claimed. Found.	1.00	---	8.00	---	1.50	---	9.50	2.00	---	14.53
			1.15	4.16	8.56	9.07	0.90	0.24	9.46	2.22	2.24	15.71
Michigan Carbon's.		1912.										
159	Michigan Carbon's Homestead Fertilizer	Claimed. Found.	2.50	---	8.00	---	1.50	---	9.50	1.50	---	19.46
			2.90	10.50	8.38	8.88	1.08	0.29	9.46	2.16	2.18	21.85
160	Michigan Carbon's Special Potash Fertilizer	Claimed. Found.	---	---	10.00	---	r1.50	---	11.50	5.00	---	15.65
			---	---	10.49	11.12	r2.30	---	12.79	4.53	4.58	15.70
161	Michigan Carbon's Red Line Phosphate	Claimed. Found.	---	---	14.00	---	r1.50	---	15.50	---	---	14.84
			---	---	15.28	16.20	r1.79	---	17.07	---	---	16.20
189	Michigan Carbon's Red Line Phosphate With Potash	Claimed. Found.	---	---	10.00	---	r1.50	---	11.50	2.00	---	12.62
			---	---	9.96	10.56	r2.56	---	12.52	2.06	2.08	12.64

* From sulphate.

a Wholly from animal matter. r Wholly from rock.
 Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Continued.	1912.										
	Michigan Carbon's—Concluded.											
215	Michigan Carbon's Wolverine	Claimed. Found.	12.00 11.77	12.48	1.50 2.23						12.72 12.48	215
360	Michigan Carbon's Homestead Grain and Root Fertilizer	Claimed. Found.	8.00 8.49	9.00	1.50 0.90				4.00 3.70		16.55 16.72	360
361	Michigan Carbon's Homestead General Crop Fertilizer	Claimed. Found.	8.00 8.50	9.01	1.50 0.83				2.00 2.08		14.53 15.31	361
400	Michigan Carbon's Homestead Vegetable Manure	Claimed. Found.	8.00 8.18	8.67	1.50 0.70				7.00 7.13		19.58 19.96	400
401	Michigan Carbon's Homestead Potato and Tobacco Fertilizer	Claimed. Found.	8.00 8.44	8.95	1.50 0.70				5.00 4.91		21.18 21.34	401

COMMERCIAL FERTILIZERS.

499

601	Michigan Carbon's Homestead Potash Fertilizer	Claimed. Found.	1.00 1.10	5.00 5.31	5.00 5.03	1.50 r1.02	6.50 6.33	10.00 11.14	19.43 20.86	601
Milsom's.										
1912.										
390	Milsom's Acid Phosphate	Claimed. Found.	---	14.00 14.65	---	r1.50 r1.95	15.50 16.60	---	14.84 15.53	390
402	Milsom's Wheat, Oats and Barley	Claimed. Found.	1.00 1.13	8.00 8.70	---	1.50 1.05	9.50 9.75	2.00 2.31	14.53 15.92	402
416	Milsom's Buffalo Complete Manure	Claimed. Found.	1.00 1.20	8.00 9.01	---	1.50 0.96	9.50 9.97	4.00 3.61	16.55 17.80	416
566	Milsom's Dissolved Phosphate and Potash	Claimed. Found.	---	10.00 10.54	---	r1.50 r2.11	11.50 12.65	2.00 2.20	12.62 13.39	566
622	Milsom's Grain and Grass Fertilizer	Claimed. Found.	2.00 2.30	8.00 9.52	---	1.50 0.90	9.50 10.42	5.00 6.00	21.18 24.72	622
638	Milsom's 12% Acid Phosphate	Claimed. Found.	---	12.00 12.70	---	r1.50 r2.20	13.50 14.90	---	12.72 13.46	638
Northwestern's.										
1912.										
4	Northwestern's Horseshoe Corn and Wheat Grover	Claimed. Found.	2.00 2.00	8.00 7.93	---	1.50 1.08	9.50 9.01	2.00 2.47	18.15 18.43	4
5	Northwestern's Horseshoe Special Potash Mixture	Claimed. Found.	1.00 1.15	5.00 5.70	---	1.50 0.99	6.50 6.69	10.00 10.64	19.43 21.22	5
67	Northwestern's Horseshoe Acidulated Phosphate and Potash	Claimed. Found.	1.00 1.10	8.00 8.85	---	1.50 1.05	9.50 9.90	2.00 2.43	14.53 16.09	67
190	Northwestern's Horseshoe Dissolved Phosphate and Potash	Claimed. Found.	---	10.00 9.97	---	r1.50 r2.30	11.50 12.27	2.00 1.98	12.62 12.57	190

* From sulphate.

^a Wholly from animal matter.
^r Wholly from rock.
 Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Continued.	1912.										
	Northwestern's—Concluded.											
208	Northwestern's Horseshoe Garden City Super-Phosphate	Claimed. Found.	2.00 2.03	7.35	10.00 10.30	10.92	1.50 1.21	0.33	2.00 2.30	2.32	20.27 20.92	208
209	Northwestern's Horseshoe Soluble Phosphate.	Claimed. Found.	— —	— —	14.00 14.71	15.59	11.50 12.30	— —	— —	— —	14.84 15.59	209
362	Northwestern's Horseshoe Pure Ground Bone.	Claimed. Found.	3.00 3.25	11.77	12.16 12.89	12.89	— 8.18	4.42	— —	— —	24.06 29.08	362
367	Northwestern's Horseshoe Root and Cereal.	Claimed. Found.	1.00 1.30	— 4.71	8.00 9.27	9.83	1.50 1.02	— 0.28	4.00 4.11	— 4.15	16.55 18.97	367
368	Northwestern's Horseshoe Potash Manure.	Claimed. Found.	— —	— —	10.00 10.42	11.05	11.50 12.30	— —	5.00 4.88	— 4.93	15.65 15.98	368
481	Northwestern's Horseshoe Challenge Vegetable Grower	Claimed. Found.	1.00 1.20	— 4.34	8.00 8.00	8.48	1.50 11.08	— —	7.00 7.47	— 7.54	19.58 20.36	481

COMMERCIAL FERTILIZERS.

501

482	Northwestern's Horseshoe Potato Grower	Claimed. Found.	2.00 2.05	7.42	8.00 8.76	9.29	1.50 0.96	0.26	9.50 9.72	5.00 4.62	4.67	21.18 21.64	482
486	Northwestern's Horseshoe Quick Acting Phosphate	Claimed. Found.	---	---	12.00 12.75	13.52	1.50 1.40	---	13.50 15.15	---	---	12.72 13.52	486
	Pacific's.	1912.											
335	Pacific's Nobsque General Crop	Claimed. Found.	2.00 2.10	7.60	8.00 8.35	8.85	1.50 1.21	0.33	9.50 9.56	2.00 2.45	2.47	18.15 19.25	335
369	Pacific's Dissolved Phosphate of Lime	Claimed. Found.	---	---	14.00 15.93	16.89	1.50 1.40	---	15.50 17.33	---	---	14.84 16.89	369
403	Pacific's Potato Phosphate	Claimed. Found.	1.00 1.25	4.53	8.00 8.82	9.35	1.50 1.08	0.29	9.50 9.90	4.00 4.05	4.09	16.55 18.26	403
417	Pacific's Complete Manure	Claimed. Found.	2.00 2.15	7.78	8.00 8.62	9.14	1.50 0.90	0.24	9.50 9.52	5.00 4.95	5.00	21.18 22.16	417
436	Pacific's A No. 1 Phosphate	Claimed. Found.	1.00 1.25	4.53	8.00 9.09	9.64	1.50 1.40	0.38	9.50 10.49	2.00 2.03	2.05	14.53 16.60	436
487	Pacific's Acid Phosphate	Claimed. Found.	---	---	12.00 12.99	13.77	1.50 1.23	---	13.50 15.22	---	---	12.72 13.77	487
	Packer's Union.	1912.											
370	Packer's Union American Wheat and Rye Grower	Claimed. Found.	1.00 1.10	3.98	8.00 8.69	9.21	1.50 0.83	0.22	9.50 9.52	2.00 2.25	2.27	14.53 15.68	370
392	Packer's Union Universal Fertilizer	Claimed. Found.	1.00 1.10	3.98	8.00 9.02	9.56	1.50 0.70	0.19	9.50 9.72	4.00 4.05	4.09	16.55 17.82	392
393	Packer's Union High Grade Potato and Tobacco	Claimed. Found.	1.00 1.00	3.62	7.00 8.12	8.61	1.50 0.51	0.14	8.50 8.63	10.00 9.67	9.77	21.55 22.14	393

* From sulphate.

^a Wholly from animal matter.

^r Wholly from rock.
Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.				Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.		Value.		Available.		Insoluble.		Percent.	Value.		
			Percent.	Value.	Percent.	Value.	Total Percent.							
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Continued.	1912.												
	Packers' Union—Concluded.													
649	Packers' Union Wheat, Oats and Clover-----	Claimed. Found.	---	---	---	---	10.00	---	11.50	---	2.00	---	12.62	649
			---	---	---	---	10.28	10.90	11.79	---	2.22	2.24	13.14	
	Quinnipiac's.	1912.												
339	Quinnipiac's Climax Phosphate-----	Claimed. Found.	2.00	---	---	---	8.00	---	1.50	---	2.00	---	18.15	339
			2.05	7.42	9.08	---	8.57	9.08	1.15	0.31	2.23	2.25	19.06	
455	Quinnipiac's Soluble Dissolved Phosphate-----	Claimed. Found.	---	---	---	---	14.00	---	11.50	---	---	---	14.84	455
			---	---	---	---	15.57	16.50	12.02	---	---	---	16.50	
	Read's.	1912.												
254	Read's Standard -----	Claimed. Found.	1.00	---	---	---	8.00	---	1.50	---	4.00	---	16.55	254
			1.15	4.16	8.95	---	8.44	8.95	0.83	0.22	3.74	3.78	17.11	
255	Read's Leader -----	Claimed. Found.	1.00	---	---	---	8.00	---	1.50	---	2.00	---	14.53	255
			1.20	4.34	8.66	9.18	8.66	9.18	0.96	0.26	2.16	2.18	15.96	

260	Read's Gold Coin-----	Claimed. Found.	2.00 2.10	7.60	8.00	---	1.50	---	9.50 9.72	2.00 2.30	---	18.15 19.34	260
602	Read's Acid Phosphate-----	Claimed. Found.	---	---	14.00 15.15	---	1.50 1.50	---	15.50 17.20	---	---	14.84 16.06	602
623	Read's Farmers' Friend-----	Claimed. Found.	2.00 2.23	8.07	8.00 9.00	---	1.50 0.90	---	9.50 9.90	5.00 6.22	---	21.18 24.13	623
Wheeler's.													
87	Wheeler's Potato Manure-----	Claimed. Found.	2.50 2.65	---	8.00 8.62	---	1.50 0.71	---	9.50 9.33	3.00 *3.78	---	21.72 23.68	87
116	Wheeler's High Grade Vegetable and Tobacco-----	Claimed. Found.	1.00 1.00	---	8.00 7.61	---	1.50 1.50	---	9.50 8.31	7.00 7.03	---	19.58 18.79	116
117	Wheeler's Wheat and Clover-----	Claimed. Found.	---	---	10.00 9.55	---	1.50 1.50	---	11.50 11.57	2.00 2.01	---	12.62 12.15	117
118	Wheeler's Peerless Acid Phosphate-----	Claimed. Found.	---	---	14.00 15.35	---	1.50 1.50	---	15.50 17.27	---	---	14.84 16.17	118
261	Wheeler's Royal Wheat Grower-----	Claimed. Found.	1.00 1.10	3.98	8.00 8.44	---	1.50 0.77	---	9.50 9.21	2.00 2.37	---	14.53 15.53	261
303	Wheeler's Corn Fertilizer-----	Claimed. Found.	2.00 2.10	7.60	8.00 8.44	---	1.50 1.08	---	9.50 9.52	2.00 2.28	---	18.15 19.14	303
Williams & Clark's.													
277	Williams & Clark's Americus Corn and Wheat Special -----	Claimed. Found.	1.00 1.30	---	8.00 8.82	---	1.50 0.96	---	9.50 9.78	2.00 2.16	---	14.53 16.50	277
278	Williams & Clark's Americus Dissolved Phos- phate -----	Claimed. Found.	---	---	12.00 12.64	---	1.50 1.50	---	13.50 14.94	---	---	12.72 13.40	278

* From sulphate.

a Wholly from animal matter. r Wholly from rock.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Concluded.	1912.										
	Williams & Clark's—Concluded.											
289	Williams & Clark's Americus Good Grower Potato Phosphate-----	Claimed. Found.	1.00 1.15	4.16	8.00 8.50	9.01	1.50 0.96	0.26	4.00 4.28	4.32	16.55 17.75	289
290	Williams & Clark's Americus Dissolved Phosphate and Potash-----	Claimed. Found.	----- -----	-----	10.00 9.84	10.43	11.50 12.36	-----	2.00 2.26	2.28	12.62 12.71	290
291	Williams & Clark's Americus Acorn Brand Acid Phosphate-----	Claimed. Found.	----- -----	-----	14.00 15.28	16.20	11.50 11.79	-----	-----	-----	14.84 16.20	291
418	Williams & Clark's Americus Prolific Crop-----	Claimed. Found.	2.00 2.05	7.42	10.00 10.36	10.98	1.50 1.53	0.41	2.00 2.60	2.63	20.27 21.44	418
	Zell's.	1912.										
270	Zell's T. & P. Super-Phosphate-----	Claimed. Found.	----- -----	-----	14.00 15.23	16.14	11.50 11.66	-----	-----	-----	14.84 16.14	270

301	Zell's Dissolved S. C. Phosphate-----	Claimed. Found.	-----	-----	12.00 12.66	-----	13.50 14.77	-----	-----	12.72 13.42	301
316	Zell's Electric Phosphate-----	Claimed. Found.	-----	-----	10.00 10.54	-----	11.50 12.52	2.00 2.37	-----	12.62 13.56	316
328	Zell's Economizer-----	Claimed. Found.	1.00 1.10	3.98 -----	8.00 8.63	-----	1.50 1.21	2.00 2.39	-----	14.53 15.87	328
603	Zell's Ammoniated Super-Phosphate-----	Claimed. Found.	2.00 2.15	7.78 -----	8.00 8.44	-----	1.50 1.18	2.00 2.46	-----	18.15 19.21	603
AMERICAN FERTILIZER COMPANY. CHICAGO, ILL.											
153	"Union Brand" Onion, Potato and Vegetable Grower-----	Claimed. Found.	2.00 2.13	7.71 -----	8.00 9.20	-----	1.50 0.70	7.00 *7.74	-----	25.35 27.40	153
191	"Union Brand" Pure Bone Meal-----	Claimed. Found.	3.00 2.70	9.77 -----	16.03 -----	-----	-----	25.00 24.44	-----	27.36 31.30	191
192	"Union Brand" King's Favorite-----	Claimed. Found.	1.00 1.10	3.98 -----	8.00 9.21	-----	1.00 1.15	3.00 3.59	-----	15.67 17.68	192
374	"Union Brand" Corn and General Crop Grower-----	Claimed. Found.	1.00 1.25	4.53 -----	8.00 9.59	-----	1.00 0.44	4.00 *4.38	-----	17.68 20.34	374
439	"Union Brand" Complete Crop Grower-----	Claimed. Found.	2.00 2.33	8.43 -----	8.00 8.60	-----	1.50 2.11	2.00 2.48	-----	18.55 21.19	439
440	"Union Brand" High Grade Celery and Gen- eral Trucker-----	Claimed. Found.	1.00 1.20	4.34 -----	6.00 7.10	-----	1.00 0.57	10.00 *10.20	-----	23.12 24.87	440

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Available.		Insoluble.		Total Percent.		Percent.	Value.			
			Percent.	Value.	Percent.	Value.							
	ARMOUR FERTILIZER WORKS, CHICAGO, ILL.	1912.											
143	1-8-2 Fertilizer	Claimed. Found.	1.00 0.95	--- 3.44	8.00 8.38	--- 8.88	0.75 1.15	--- 0.31	--- 9.53	2.00 2.78	--- 2.81	14.32 15.44	143
173	Armour's Ohio Special	Claimed. Found.	1.00 1.10	--- 3.98	8.00 7.80	--- 8.27	0.75 1.21	--- 0.33	--- 9.01	4.00 4.23	--- 4.27	16.34 16.85	173
174	Star Phosphate	Claimed. Found.	--- ---	--- ---	14.00 14.78	--- 15.67	0.50 0.70	--- ---	--- 15.48	--- ---	--- ---	14.84 15.67	174
175	16% Acid Phosphate	Claimed. Found.	--- ---	--- ---	16.00 16.81	--- 17.82	0.50 1.03	--- ---	--- 17.84	--- ---	--- ---	16.96 17.82	175
203	Wheat, Corn and Oats Special	Claimed. Found.	1.00 1.05	--- 3.80	9.00 9.18	--- 9.73	0.75 1.18	--- 0.32	--- 10.36	1.00 1.31	--- 1.32	14.37 15.17	203
204	Grain Grower	Claimed. Found.	2.00 2.10	--- 7.60	8.00 8.24	--- 8.73	0.75 1.79	--- 0.48	--- 10.03	2.00 2.03	--- 2.05	17.94 18.86	204
205	Fruit and Root	Claimed. Found.	2.00 2.25	--- 8.15	8.00 8.86	--- 9.39	0.75 1.53	--- 0.41	--- 10.39	5.00 5.39	--- 5.44	20.97 23.39	205

246	High Grade Potato-----	Claimed. Found.	2.00 2.05	7.42 ---	8.00 8.25	8.75 ---	0.75 2.11	---	0.37	10.36 ---	10.00 9.93	---	10.03	26.02 26.77	246
264	Crop Grower -----	Claimed. Found.	1.50 1.65	5.97 ---	8.00 8.66	9.18 ---	0.75 1.37	---	0.37	10.03 ---	2.00 2.64	---	2.67	16.13 18.19	264
265	Soluble Phosphate and Potash-----	Claimed. Found.	---	---	10.00 10.36	10.98 ---	r0.50 r0.70	---	---	11.06 ---	4.00 4.14	---	4.18	14.64 15.16	265
318	Banner Brand -----	Claimed. Found.	---	---	10.00 10.86	11.51 ---	r0.50 r1.15	---	---	12.01 ---	8.00 7.94	---	8.02	18.68 19.53	318
332	Bone, Potash and Phosphate-----	Claimed. Found.	1.00 1.30	4.71 ---	13.00 12.47	13.22 ---	5.25 6.72	---	1.81	19.19 ---	4.00 2.10	---	2.12	22.86 21.86	332
338	U. S. Phosphate-----	Claimed. Found.	---	---	12.00 13.59	14.41 ---	r0.50 r0.67	---	---	14.26 ---	---	---	---	12.72 14.41	338
375	Potash Trucker -----	Claimed. Found.	1.00 1.18	4.27 ---	8.00 8.25	8.75 ---	0.75 1.40	---	0.38	9.65 ---	8.00 7.38	---	7.45	20.38 20.85	375
381	Bone, Blood and Potash-----	Claimed. Found.	5.00 5.25	19.01 ---	8.00 9.11	9.66 ---	0.50 7.36	---	1.99	16.47 ---	7.00 7.76	---	7.84	33.79 38.50	381
420	Phosphate and Potash-----	Claimed. Found.	---	---	10.00 10.17	10.78 ---	r0.50 r1.34	---	---	11.51 ---	2.00 2.30	---	2.32	12.62 13.10	420
438	1-5-10 Fertilizer -----	Claimed. Found.	1.00 1.08	3.91 ---	5.00 4.92	5.22 ---	0.75 0.83	---	0.22	5.75 ---	10.00 10.24	---	10.34	19.22 19.69	438
483	Ammoniated Bone with Potash-----	Claimed. Found.	3.00 3.60	13.03 ---	6.00 9.47	10.04 ---	a0.50 a1.72	---	0.93	11.19 ---	2.00 1.54	---	1.56	19.51 25.56	483
594	Ten-Five Fertilizer -----	Claimed. Found.	---	---	10.00 10.58	11.21 ---	r0.50 r1.12	---	---	11.70 ---	5.00 4.66	---	4.71	15.65 15.92	594

* From sulphate.

a Wholly from animal matter. r Wholly from rock.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Total Percent.	Percent.			Value.
					Percent.	Value.	Percent.	Value.					
644	ARMOUR FERTILIZER WORKS, CHICAGO, ILL.—Concluded.	1912.											
		Claimed.	1.00	---	8.00	---	0.75	---	4.00	---	16.34		
		Found.	1.20	4.34	9.14	9.69	0.70	0.19	4.74	4.79	19.01	644	
648	Gleaner Ohio Special	Claimed.	1.00	---	8.00	---	0.75	---	4.00	---	16.34		
		Found.	1.20	4.34	8.78	9.31	1.25	0.34	3.97	4.01	18.00	648	
		1912.											
377	BASH FERTILIZER & CHEMICAL CO., THE, FORT WAYNE, IND.	1912.											
		Claimed.	1.20	---	8.00	---	1.00	---	4.00	---	17.13		
		Found.	1.15	4.16	9.39	9.95	0.13	0.04	4.40	4.44	18.59	377	
444	Bashumus Tobacco Special	Claimed.	1.50	---	8.00	---	1.00	---	5.00	---	19.23		
		Found.	1.40	5.07	7.16	7.59	0.32	0.09	5.22	5.27	18.02	444	
		1912.											
469	Bashumus Big Crop Producer	1912.											
		Claimed.	2.00	---	8.00	---	1.00	---	2.00	---	18.01		
		Found.	2.00	7.24	6.40	6.78	0.38	0.10	2.32	2.34	16.46	469	

470	Bashumus 14% Phosphate-----	Claimed. Found.	---	---	14.00	---	16.01	r1.00	---	15.00	---	---	---	14.84	16.01	470
491	Bashumus Garden Special-----	Claimed. Found.	1.20	---	8.00	---	---	1.00	---	9.00	10.00	---	---	23.19	22.71	491
629	Bashumus Grain Grower-----	Claimed. Found.	1.00	3.62	8.76	9.29	---	r0.32	---	9.08	9.70	9.80	---	22.71	22.71	491
			1.50	---	8.00	---	---	1.00	---	9.00	2.00	---	---	16.20	16.20	629
			1.60	5.79	8.70	9.22	0.10	0.38	0.10	9.08	2.39	2.41	---	17.52	17.52	629
	BELL FERTILIZER COMPANY, THE GEO. A., WHEELERSBURG, O.	1912.														
385	Potato and Tobacco-----	Claimed. Found.	1.00	---	8.00	---	---	2.00	---	10.00	4.00	---	---	17.68	30.09	385
463	Bell's Complete -----	Claimed. Found.	3.40	12.31	11.71	12.41	---	4.47	1.21	16.18	*3.30	4.16	---	30.09	30.09	385
666	Bell's Phosphate -----	Claimed. Found.	1.00	---	10.00	---	---	2.00	---	12.00	2.00	---	---	17.28	21.99	463
			1.70	6.15	11.26	11.94	---	2.68	0.72	13.94	*2.52	3.18	---	21.99	21.99	463
			---	---	15.00	---	---	r2.00	---	17.00	---	---	---	15.90	21.30	666
			---	---	20.09	21.30	---	r2.23	---	22.32	---	---	---	21.30	21.30	666
	BOWKER FERTILIZER CO., BOSTON, MASS., AND NEW YORK, N. Y.	1912.														
533	Bowker's Ammoniated Food for Flowers-----	Claimed. Found.	3.00	---	6.00	---	---	---	---	---	2.00	---	---	19.74	24.36	533
			3.08	11.15	7.67	8.13	---	1.28	0.35	9.85	*3.75	4.73	---	24.36	24.36	533
	CANTON FERTILIZER & CHEMICAL CO., THE, CANTON, O.	1912.														
11	Peerless Super-Phosphate -----	Claimed. Found.	2.00	---	8.00	---	---	---	---	---	2.00	---	---	17.74	23.16	11
			2.70	9.77	8.44	8.95	---	2.05	0.55	10.49	3.85	3.89	---	23.16	23.16	11
55	Peerless Ohio Grain and Truck Grower-----	Claimed. Found.	1.00	---	8.00	---	---	---	---	---	4.00	---	---	16.14	19.01	55
			1.10	3.98	8.00	9.01	---	1.53	0.41	10.03	5.55	5.61	---	19.01	19.01	55

* From sulphate.

a Wholly from animal matter.

r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	CANTON FERTILIZER & CHEMICAL CO. THE, CANTON, O.—Concluded.	1912.										
56	Peerless Vegetable Grower-----	Claimed. Found.	1.50 2.10	7.60	8.00 8.07	8.55	2.36	0.64	7.00 6.32	6.38	20.98 23.17	56
57	Peerless Tobacco and Potato Special-----	Claimed. Found.	1.00 1.10	3.98	5.00 5.76	6.11	1.02	0.28	10.00 10.85	10.96	19.02 21.33	57
141	Peerless Corn, Wheat and Grass Grower-----	Claimed. Found.	1.00 1.35	4.89	8.00 8.70	9.22	1.53	0.41	2.00 2.10	2.12	14.12 16.64	141
142	Peerless Potash Mixture-----	Claimed. Found.	----- -----	-----	10.00 10.29	10.91	10.26	-----	5.00 4.97	5.02	15.65 15.93	142
168	Peerless Onion and Celery Grower-----	Claimed. Found.	2.00 2.25	8.15	8.00 8.41	8.91	0.64	0.17	10.00 10.29	10.39	25.82 27.62	168
169	Peerless Dissolved Phosphate-----	Claimed. Found.	----- -----	-----	14.00 13.94	14.78	12.56	-----	-----	-----	14.84 14.78	169
170	Peerless Dissolved Phosphate With Potash-----	Claimed. Found.	----- -----	-----	10.00 10.54	11.17	10.77	-----	2.00 2.08	2.10	12.62 13.27	170

399	Peerless Bone and Meat with Potash	Claimed. Found.	1.00 1.45	5.25 13.36	14.37	3.64	0.98	16.00 17.20	2.00 3.08	3.11	16.20 23.71	399
CENTRAL MANUFACTURING CO., LOCKLAND, O.												
148	Equity Wheat Grower	Claimed. Found.	1.00 1.85	8.00 8.31	8.81	1.00 1.34	0.36	9.00 9.65	3.50 3.24	3.27	15.91 19.14	148
149	Equity Pota-Bacco Special	Claimed. Found.	2.00 1.40	9.00 8.56	9.07	1.50 0.96	0.26	10.50 9.52	5.00 5.99	6.05	22.24 20.45	149
†D- 149	Equity Poto-Bacco Special	Claimed. Found.	2.00 2.45	9.00 9.78	10.37	1.50 1.53	0.41	10.50 11.31	5.00 5.87	5.93	22.24 25.58	D 149
150	Equity High Grade Truck Food	Claimed. Found.	2.50 2.85	6.00 7.80	8.27	1.50 1.21	0.33	7.50 9.01	8.00 8.23	8.31	23.90 27.23	150
152	Equity Celery Special	Claimed. Found.	3.00 3.20	6.00 7.99	8.47	2.00 1.98	0.53	8.00 9.97	10.00 10.29	10.39	27.86 30.97	152
193	Equity Oats Special	Claimed. Found.	---	9.00 9.98	10.58	1.00 1.51	---	10.00 10.49	3.00 3.27	3.30	12.57 13.88	193
194	Equity Crop Maker	Claimed. Found.	1.50 2.30	8.00 8.33	9.56	1.00 1.40	0.38	9.00 10.42	2.50 2.93	2.96	16.71 21.23	194
195	Equity Home Mixture	Claimed. Found.	2.50 2.40	8.00 8.69	9.84	1.50 1.08	0.29	9.50 10.36	3.00 4.51	4.56	20.97 23.38	195
306	Equity Ohio Wonder	Claimed. Found.	---	12.00 14.07	14.91	1.00 1.64	---	13.00 14.71	5.00 4.55	4.60	17.77 19.51	306
310	Equity Rock Phosphate	Claimed. Found.	---	14.00 15.38	16.30	1.00 1.15	---	15.00 16.53	---	---	14.84 16.30	310

† Note—This analysis is published at the request of the Manufacturer who was not satisfied with the first analysis of this brand. This duplicate sample was collected by a regular inspector of this Department and was not furnished by the Manufacturer.

r Wholly from rock.

* From sulphate.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
493	CENTRAL MANUFACTURING CO., LOCKLAND, O.—Concluded. Equity Clay Land Wheat Special	1912.										
		Claimed. Found.	1.00 1.55	5.61	10.00 11.02	11.68	1.50 1.31	0.35	11.50 12.33	1.00 1.87	15.64 19.53	493
7	CINCINNATI PHOSPHATE CO., THE, CINCINNATI, O. Dissolved Phosphate and Potash	1912.										
		Claimed. Found.	— —	—	10.00 11.12	11.79	1.00 0.83	—	11.00 11.95	4.00 3.96	14.64 15.79	7
8	Wheat Grower	Claimed. Found.	— —	—	14.00 15.73	16.67	1.00 0.64	—	15.00 16.37	— —	14.84 16.67	8
		Claimed. Found.	1.00 1.45	5.25	8.00 8.35	8.85	1.00 0.67	0.18	9.00 9.02	4.00 *5.01	17.41 20.59	9
10	Black Soil Fertilizer	Claimed. Found.	— —	—	8.00 8.82	9.35	1.00 0.57	—	9.00 9.39	8.00 8.03	16.56 17.46	10

No.	Name of Fertilizer	Claimed. Found.	1.00 1.15	8.00 9.59	10.00 10.17	1.00 0.64	9.00 10.23	2.00 2.12	14.39 16.64
250	Grain and Grass Grower	Claimed. Found.	1.00 1.15	8.00 9.59	10.00 10.17	1.00 0.64	9.00 10.23	2.00 2.12	14.39 16.64
251	"Bonus" A Humus Phosphate	Claimed. Found.	0.50 0.65	12.00 13.63	14.45 15.00	1.00 0.37	13.00 15.00	---	14.53 16.80
252	Truck and Tobacco Fertilizer	Claimed. Found.	2.00 2.30	6.00 7.48	7.93 8.33	1.00 0.51	7.00 7.99	6.00 *5.86	21.43 23.78
363	High Grade Manure	Claimed. Found.	1.50 1.50	8.00 9.27	9.83 10.15	1.00 1.15	9.00 10.42	2.50 2.49	16.71 18.08
364	High Potash Manure	Claimed. Found.	1.00 1.15	6.00 7.10	7.53 7.80	1.00 0.57	7.00 7.67	8.00 8.05	18.33 19.97
548	Bone and Phosphate Mixture Wheat Special	Claimed. Found.	2.00 2.05	10.00 9.91	10.50 11.21	2.00 1.27	16.00 17.71	1.00 1.27	22.09 21.31
DARLING AND COMPANY, CHICAGO, ILL.									
91	Darling's Sure Winner Brand	Claimed. Found.	1.00 1.15	8.00 8.50	9.01 9.38	2.00 1.40	10.00 9.90	3.00 2.89	16.21 16.47
314	Darling's General Crop Brand	Claimed. Found.	1.00 1.00	8.00 8.88	9.41 9.66	2.00 0.96	10.00 9.84	6.00 6.45	19.24 19.80
319	Darling's Chicago Brand	Claimed. Found.	2.00 2.20	8.00 9.30	9.86 10.29	2.00 0.99	10.00 10.29	2.00 2.53	18.82 20.65
320	Darling's High Grade Acid Phosphate	Claimed. Found.	---	14.00 14.71	15.59 16.64	---	15.35 ---	---	14.84 15.59
321	Darling's Ten-Five Brand	Claimed. Found.	---	10.00 10.58	11.21 11.92	---	11.25 ---	5.00 4.66	15.65 15.92

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	DARLING AND COMPANY, CHICAGO, ILL.—Concluded.	1912.										
396	Darling's Big Potash Brand-----	Claimed. Found.	1.50 2.78	10.06	8.00 9.41	9.97	2.00 1.46	10.00 10.87	10.00 7.78	7.86	25.09 28.28	396
477	Darling's Sugar Beet and Root Grower-----	Claimed. Found.	2.00 1.95	7.06	8.00 8.95	9.49	2.00 2.05	10.00 11.00	5.00 5.16	5.21	21.85 22.87	477
494	Darling's Farmers' Favorite Brand-----	Claimed. Found.	3.00 3.15	11.40	8.00 8.32	8.82	2.00 3.19	10.00 11.51	4.00 4.47	4.51	24.46 25.59	494
507	Darling's Vegetable and Lawn Fertilizer-----	Claimed. Found.	4.00 3.98	14.05	8.00 9.43	10.00	2.00 1.25	10.00 10.68	7.00 7.30	7.37	31.11 31.76	507
508	Darling's Phosphate and Potash Brand-----	Claimed. Found.	----- -----	-----	10.00 7.73	8.19	----- 3.33	----- 11.06	2.00 1.68	1.70	12.62 9.89	508
	ENTERPRISE GUANO COMPANY, BALTIMORE, MD.	1912.										
441	Enterprise Ideal Grain Grower-----	Claimed. Found.	1.00 1.20	4.34	8.00 8.31	8.81	1.00 0.83	----- 9.14	4.00 5.18	5.23	16.41 18.60	441

442	Enterprise Star Brand-----	Claimed. Found.	1.00 1.25	4.53 8.82	8.00 9.35	1.00 0.83	0.22 9.65	7.00 7.34	7.41 21.51	19.44 442
443	Enterprise Peerless Tobacco and Potato Com- pound-----	Claimed. Found.	2.00 2.05	7.42 8.04	8.52 10.06	1.00 0.84	8.88 10.06	9.00 9.96	24.02 26.23	443
554	Enterprise Acid Phosphate-----	Claimed. Found.	----- -----	----- 14.00	----- 15.73	1.00 0.90	15.00 16.63	----- -----	14.84 16.67	554
555	Enterprise Superior Acid Phosphate-----	Claimed. Found.	----- -----	----- 16.00	----- 17.84	1.00 0.51	17.00 18.35	----- -----	16.96 18.91	555
556	Enterprise Grain and Grass Compound-----	Claimed. Found.	----- -----	----- 10.00	----- 10.30	0.50 0.44	----- 10.74	2.00 2.22	12.62 13.16	556
557	Enterprise High Grade Potash Mixture-----	Claimed. Found.	----- -----	----- 10.00	----- 10.10	0.50 0.51	----- 10.61	5.00 5.15	15.65 15.91	557
558	Enterprise Complete Guano-----	Claimed. Found.	1.00 1.20	4.34 8.63	9.15 10.71	1.00 0.64	----- 0.17	2.00 2.66	14.39 16.35	558
559	Enterprise Corn and Wheat Compound-----	Claimed. Found.	2.00 1.88	6.81 8.50	9.01 10.01	0.83 0.83	9.33 10.01	2.00 3.17	18.01 19.24	559
560	Enterprise Complete Manure for all Crops-----	Claimed. Found.	2.00 2.30	8.33 8.92	9.46 10.71	1.00 0.77	9.69 10.71	5.00 5.88	21.04 23.94	560
FARMERS' FERTILIZER COMPANY, THE, COLUMBUS, O.										
83	Farmers' "16"-----	Claimed. Found.	----- -----	----- 16.00	----- 16.82	----- 0.96	----- 17.78	----- -----	16.96 17.83	83
207	Farmers' Twelve-Five-----	Claimed. Found.	----- -----	----- 12.00	----- 12.47	----- 13.22	----- 13.81	5.00 5.38	19.02 20.00	207

^a Wholly from rock.

^r Wholly from animal matter.

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* From sulphate.

TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	FARMERS' FERTILIZER COMPANY, THE, COLUMBUS, O.—Concluded.	1912.										
266	Farmers' Special Potash Mixture-----	Claimed. Found.	---	---	---	---	---	---	5.00 *5.18	---	16.90 16.90	266
412	Wheat, Corn and Oats Special-----	Claimed. Found.	2.00 1.85	---	---	---	---	---	2.00 2.26	---	17.74 17.80	412
413	Dissolved Phosphate and Potash-----	Claimed. Found.	---	---	---	---	---	---	2.00 *2.23	---	13.12 13.05	413
414	Farmers' Acid Phosphate-----	Claimed. Found.	---	---	---	---	---	---	---	---	14.84 17.04	414
511	Wheat Grower -----	Claimed. Found.	1.00 1.05	---	---	---	---	---	4.00 3.87	---	20.38 20.05	511
633	Farmers' Favorite Fertilizer-----	Claimed. Found.	1.00 1.00	3.62	8.53	2.62	0.71	10.67	4.00 4.03	---	16.14 16.93	633

650	Reinforced Potash Manure-----	Claimed. Found.	2.00 1.85	6.70 ---	7.00 7.03	7.45 ---	1.72 ---	0.46 ---	8.75 ---	10.00 11.52	11.64 ---	24.76 26.25	650
651	Potato, Tobacco, Onion and Truck Special-----	Claimed. Found.	1.00 0.60	2.17 ---	6.00 5.37	5.69 ---	0.77 ---	0.21 ---	6.14 ---	8.00 20.17	20.37 ---	18.06 28.44	651
	FEDERAL CHEMICAL COMPANY, INC., LOUISVILLE, KY.	1912.											
219	Daybreak Standard Crop and Tobacco Grower-----	Claimed. Found.	1.00 1.10	3.98 ---	8.00 8.31	8.81 ---	2.05 ---	0.55 ---	10.36 ---	4.00 4.03	4.07 ---	16.14 17.41	219
220	Daybreak Wheat and Corn Manure-----	Claimed. Found.	1.00 0.95	3.44 ---	8.00 8.32	8.82 ---	2.17 ---	0.59 ---	10.49 ---	2.00 *2.04	2.57 ---	14.62 15.42	220
	FERTILIZER COMPANY OF PARIS, ILL., PARIS, ILL.	1912.											
495	Farmers' Friend Grain Grower-----	Claimed. Found.	4.00 3.75	13.58 ---	10.00 17.18	18.21 ---	6.00 7.10	1.92 ---	16.00 24.28	---	---	26.70 33.71	495
	FLOWER CITY PLANT FOOD CO., ROCHESTER, N. Y.	1912.											
569	Walker's Excelsior Plant Food-----	Claimed. Found.	12.00 7.80	28.24 ---	12.00 2.56	2.71 ---	10.29 ---	2.78 ---	12.85 *	11.00 *13.50	17.01 ---	70.02 50.74	569
	FOX CHEMICAL COMPANY (BRANCH OF FEDERAL CHEMICAL CO., INC.), LOUISVILLE, KY.	1912.											
535	Fox Acid Phosphate-----	Claimed. Found.	---	---	14.00 16.44	17.43 ---	14.41 ---	---	20.85 ---	---	---	14.84 17.43	535
639	Fox Wheat and Grain Special-----	Claimed. Found.	1.00 1.10	3.98 ---	12.00 13.75	14.58 ---	2.43 ---	0.66 ---	14.00 16.18	1.00 *1.12	1.41 ---	17.60 20.63	639

* From sulphate.

a Wholly from animal matter.
 r Wholly from rock.
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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	FARMERS' FERTILIZER COMPANY, THE, COLUMBUS, O.—Concluded.	1912.										
266	Farmers' Special Potash Mixture-----	Claimed. Found.	----- -----	----- -----	10.00 9.78	10.37 -----	----- r1.79	----- -----	5.00 *5.18	----- 6.53	16.90 16.90	266
412	Wheat, Corn and Oats Special-----	Claimed. Found.	2.00 1.85	6.70 -----	8.00 8.32	8.82 -----	r1.46 -----	----- -----	2.00 2.26	----- 2.28	17.74 17.80	412
413	Dissolved Phosphate and Potash-----	Claimed. Found.	----- -----	----- -----	10.00 9.66	10.24 -----	----- r1.21	----- -----	2.00 *2.23	----- 2.81	13.12 13.05	413
414	Farmers' Acid Phosphate-----	Claimed. Found.	----- -----	----- -----	14.00 16.08	17.04 -----	----- r0.90	----- -----	----- -----	----- -----	14.84 17.04	414
511	Wheat Grower -----	Claimed. Found.	1.00 1.05	3.80 -----	12.00 11.64	12.34 -----	----- r2.02	----- -----	4.00 3.87	----- 3.91	20.38 20.05	511
633	Farmers' Favorite Fertilizer-----	Claimed. Found.	1.00 1.00	3.62 -----	8.00 8.05	8.53 -----	2.62 0.71	----- 10.67	4.00 4.03	----- 4.07	16.14 16.93	633

650	Reinforced Potash Manure-----	Claimed. Found.	2.00 1.85	6.70 7.03	7.00 7.45	1.72 0.46	10.00 11.52	11.64 26.25	24.76 650
651	Potato, Tobacco, Onion and Truck Special-----	Claimed. Found.	1.00 0.60	6.00 2.17	6.00 5.69	0.77 0.21	8.00 20.17	18.06 28.44	19.06 651
	FEDERAL CHEMICAL COMPANY, INC., LOUISVILLE, KY.	1912.							
219	Daybreak Standard Crop and Tobacco Grower-----	Claimed. Found.	1.00 1.10	8.00 3.98	8.00 8.81	2.05 0.55	4.00 10.36	16.14 17.41	16.14 219
220	Daybreak Wheat and Corn Manure-----	Claimed. Found.	1.00 0.95	8.00 3.44	8.00 8.82	2.17 0.59	2.00 *2.04	14.62 15.42	14.62 220
	FERTILIZER COMPANY OF PARIS, ILL., PARIS, ILL.	1912.							
495	Farmers' Friend Grain Grower-----	Claimed. Found.	4.00 3.75	10.00 13.58	10.00 18.21	6.00 7.10	16.00 24.28	26.70 33.71	26.70 495
	FLOWER CITY PLANT FOOD CO., ROCHESTER, N. Y.	1912.							
569	Walker's Excelsior Plant Food-----	Claimed. Found.	12.00 7.80	12.00 28.24	12.00 2.71	10.29 2.78	11.00 *13.50	70.02 50.74	70.02 569
	FOX CHEMICAL COMPANY (BRANCH OF FEDERAL CHEMICAL CO., INC.), LOUISVILLE, KY.	1912.							
535	Fox Acid Phosphate-----	Claimed. Found.	14.00 16.44	14.00 17.43	14.00 14.41	20.85 17.43	14.84 17.43	14.84 535	14.84 535
639	Fox Wheat and Grain Special-----	Claimed. Found.	1.00 1.10	12.00 3.98	12.00 13.75	14.58 0.66	1.00 *1.12	17.80 20.63	17.80 639

* From sulphate.

^a Wholly from animal matter. ^r Wholly from rock.
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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

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			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
640	FOX CHEMICAL COMPANY (BRANCH OF FEDERAL CHEMICAL CO., INC.), LOUISVILLE, KY.—Concluded.	1912.	0.50 0.63	2.28 14.10	12.00 13.30	14.10	7.04	20.34	14.53 16.38	640		
267	Fox Corn and Wheat Special	Claimed. Found.	2.00 1.65	5.97	9.00 10.01	10.61	1.00 1.05	0.28	6.00 *6.59	8.30	24.61 25.16	267
421	FRANK & SONS, L., ZANESVILLE, O.	1912.										
	Potato Phosphate	Claimed. Found.			10.00 10.24	10.85	11.00 11.46		2.00 1.95	1.97	12.62 12.82	421
466	Ten-Two	Claimed. Found.	2.00 2.05	7.42	10.00 12.41	13.15	1.00 2.94	0.79	2.00 2.47	2.49	20.13 23.85	466
467	Century	Claimed. Found.	1.00 0.95	3.44	9.00 9.80	10.39	1.00 2.72	0.73	1.00 1.22	1.23	14.44 15.79	467
468	Anti Trust	Claimed. Found.			16.00 16.50	17.49	1.00 1.06				16.96 17.49	468
	Enterprise	Claimed. Found.										468

GLOBE FERTILIZER COMPANY (BRANCH OF FEDERAL CHEMICAL CO., INC.), LOUISVILLE, KY.		1912.										
446	Universal Crop and Tobacco Grower.....	Claimed. Found.	1.00 1.55	8.00 5.61	8.00 8.38	8.88 1.59	0.43 0.43	9.97 9.97	4.00 4.88	4.93 4.93	16.14 19.35	446
632	Globe Grain Grower.....	Claimed. Found.	1.00 1.10	9.00 3.98	9.00 10.17	10.78 3.58	0.97 0.97	13.75 13.75	1.00 *1.45	1.83 1.83	14.42 17.56	632
652	Braden Formula	Claimed. Found.	1.00 1.00	11.00 3.62	11.00 11.76	12.47 3.46	0.93 0.93	15.22 15.22	3.00 *2.64	3.33 3.33	19.06 20.35	652
653	Eagle Corn and Wheat Grower.....	Claimed. Found.	2.00 2.10	8.00 7.60	8.00 8.83	9.36 2.74	0.74 0.74	11.57 11.57	2.00 *3.35	4.22 4.22	18.24 21.92	653
654	Globe Potash Special.....	Claimed. Found.	--- ---	--- ---	10.00 9.35	9.91 19.39	--- ---	12.00 18.74	2.00 1.57	--- 1.59	12.82 11.50	654
GROVES COMPANY, THE, CINCINNATI, O.		1912.										
19	Wheat and Oats.....	Claimed. Found.	--- ---	--- ---	10.00 10.03	10.63 12.11	--- ---	12.00 12.14	2.00 2.43	--- 2.45	12.82 13.08	19
20	Potash Mixture	Claimed. Found.	--- ---	--- ---	10.00 10.22	10.83 11.92	--- ---	12.00 12.14	5.00 4.97	--- 5.02	15.65 15.85	20
103	Monarch Brand	Claimed. Found.	--- ---	--- ---	14.00 14.14	14.99 12.23	--- ---	16.00 16.37	--- ---	--- ---	14.84 14.99	103
104	Complete Grain Grower.....	Claimed. Found.	1.00 1.20	4.34 4.34	8.00 8.89	2.00 9.42	0.36 1.34	10.00 10.23	2.00 2.47	--- 2.49	14.66 16.61	104
105	Corn and Tobacco Grower.....	Claimed. Found.	1.00 1.15	4.16 4.16	8.00 7.90	2.00 8.37	0.18 0.18	10.00 8.57	4.00 4.09	--- 4.13	16.68 16.84	105

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

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			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
GROVES COMPANY, THE, CINCINNATI, O.—Concluded.												
106	Favorite Fertilizer	1912. Claimed. Found.	2.00 2.03	7.35	8.00 8.18	8.67	2.00 1.79	10.00 9.97	2.00 2.35	18.28 18.87	106	
107	Special Truck Manure	Claimed. Found.	2.00 1.95	7.06	8.00 8.64	9.16	2.00 1.59	10.00 10.23	8.00 *8.23	26.34 27.02	107	
496	Half and Half	Claimed. Found.	2.00 2.25	8.15	11.32	12.00	6.91	16.00 18.23	2.00 2.18	19.82 24.22	496	
519	Pure Ground Bone	Claimed. Found.	3.00 3.83	13.86	10.24	10.85	13.87	20.00 24.11	---	24.06 32.20	519	
549	10% Potash Fertilizer	Claimed. Found.	1.00 1.00	3.62	5.00 5.69	6.03	2.00 0.64	7.00 6.33	10.00 12.24	19.56 22.18	549	
550	Special Onion and Truck	Claimed. Found.	3.00 2.85	10.32	9.00 8.95	9.49	2.00 0.64	11.00 9.59	10.00 12.71	31.04 32.82	550	

HAMM COMPANY, THE M., WASHINGTON C. H., O.												1912.
134	Truck Grower	Claimed. Found.	1.00 1.10	3.98	8.00 8.70	9.22	1.00 3.25	9.00 11.95	8.00 *10.56	13.31	22.45 27.39	134
135	Corn and Tobacco	Claimed. Found.	---	---	14.00 15.22	16.13	11.00 12.56	15.00 17.78	4.00 *4.41	5.56	19.88 21.69	135
136	Potash Special	Claimed. Found.	---	---	10.00 11.61	12.31	11.00 12.46	11.00 14.07	5.00 *4.83	6.09	16.90 18.40	136
137	Oats and Corn	Claimed. Found.	---	---	10.00 8.89	9.42	11.00 14.22	11.00 13.11	2.00 2.34	2.36	12.62 11.78	137
138	Wheat Special	Claimed. Found.	---	---	18.00 19.84	21.03	11.00 12.23	19.00 22.07	---	---	19.08 21.03	138
139	Dissolved Phosphate	Claimed. Found.	---	---	16.00 19.29	20.45	11.00 10.77	17.00 20.06	---	---	16.96 20.45	139
140	Standard Phosphate	Claimed. Found.	---	---	14.00 18.49	19.60	11.00 12.68	15.00 21.17	---	---	14.84 19.60	140
445	Hamm's Special	Claimed. Found.	2.00 2.15	7.78	10.00 11.90	12.61	3.00 3.13	13.00 15.03	3.00 3.11	3.14	21.68 24.38	445
570	General Crop	Claimed. Found.	1.00 1.30	4.71	8.00 8.88	9.41	1.00 3.58	9.00 12.46	2.00 2.49	2.51	14.39 17.60	570
627	Acidulated Special	Claimed. Found.	1.00 1.25	4.53	10.00 11.19	11.86	1.00 2.43	11.00 13.62	2.00 2.18	2.20	16.51 19.25	627
HAMMOND'S SLUG SHOT WORKS, FISHKILL LANDING, N. Y.												
383	Hammond's Sward Food	Claimed. Found.	2.85 2.85	10.32	4.50 5.05	5.35	21.00 20.83	5.50 5.88	4.60 5.90	5.96	20.28 21.85	383

* From sulphate.

^a Wholly from animal matter. r Wholly from rock.
 Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Value.		Available.		Insoluble.		Percent.	Value.		
			Percent.	Value.	Percent.	Value.	Percent.	Value.				
	HESS & BRO., S. M., INC., PHILADELPHIA, PA., AND CLEVELAND, O.	1912.										
12	Special Corn Manure-----	Claimed. Found.	1.00 1.10	--- 3.98	8.00 8.32	--- 8.82	1.50 1.40	--- 0.38	2.00 2.46	--- 2.48	14.53 15.66	12
13	High Grade Acid Phosphate-----	Claimed. Found.	--- ---	--- ---	14.00 14.53	--- 15.40	1.50 1.50	--- ---	--- ---	--- ---	14.84 15.40	13
54	Farmers' Special Phosphate-----	Claimed. Found.	1.00 1.05	--- 3.80	5.00 5.44	--- 5.77	1.50 0.70	--- 0.19	10.00 11.30	--- 11.41	19.43 21.17	54
51	Calumet Brand Special 10% Potash Manure--	Claimed. Found.	--- ---	--- ---	10.00 10.22	--- 10.83	1.50 1.50	--- ---	2.00 2.30	--- 2.32	12.62 13.15	81
82	Ground Bone -----	Claimed. Found.	3.00 3.15	11.40 13.51	13.51 14.32	--- 26.58	--- 3.55	--- 20.09	--- 20.09	--- ---	24.06 29.27	82
92	Keystone Phosphate -----	Claimed. Found.	1.00 1.00	--- 3.62	8.00 7.67	--- 8.13	1.50 1.15	--- ---	2.00 2.04	--- 2.06	14.53 13.81	92
93	Special Compound -----	Claimed. Found.	1.00 1.05	--- 3.80	8.00 8.37	--- 8.87	1.50 1.15	--- ---	4.00 4.12	--- 4.16	16.55 16.83	93

132	Potato and Truck Manure-----	Claimed. Found.	3.00 2.93	10.61 ---	8.00 7.70	8.16 ---	1.50 1.12	0.30 ---	9.50 8.52	6.00 6.03	6.09 ---	25.81 25.16	132
133	Wheat and Grass Manure-----	Claimed. Found.	1.00 1.10	3.98 ---	8.00 8.44	8.95 ---	1.50 1.02	---	9.50 9.46	2.00 2.24	2.26 ---	14.53 15.19	133
162	Ammoniated Super-Phosphate-----	Claimed. Found.	2.00 2.10	7.60 ---	8.00 8.25	8.75 ---	1.50 1.02	---	9.50 9.27	2.00 2.40	2.42 ---	18.15 18.77	162
245	Peerless Phosphate-----	Claimed. Found.	---	---	12.00 11.64	12.34 ---	1.50 1.36	---	13.50 14.00	4.00 3.93	3.97 ---	16.76 16.31	245
281	Acid Phosphate-----	Claimed. Found.	---	---	12.00 12.73	13.49 ---	1.50 1.11	---	13.50 14.84	---	---	12.72 13.49	281
HIRSH, STEIN & COMPANY, CHICAGO, ILL.													
14	Calumet Grand Wheat, Corn and Oats Special-----	Claimed. Found.	1.00 1.05	3.80 ---	8.00 9.07	9.61 ---	1.00 1.00	---	9.00 9.84	4.00 4.61	4.66 ---	16.41 18.07	14
50	Calumet Brand Phosphate and Potash-----	Claimed. Found.	---	---	10.00 11.17	11.84 ---	1.00 0.90	---	11.00 12.07	2.00 2.04	2.06 ---	12.89 14.14	50
51	Calumet Brand Special 10% Potash Manure-----	Claimed. Found.	1.00 1.00	3.62 ---	5.00 6.12	6.49 ---	1.00 1.00	---	6.00 6.66	10.00 11.47	11.58 ---	19.29 21.69	51
326	Calumet Brand High Grade Phosphate and Potash-----	Claimed. Found.	---	---	10.00 11.10	11.77 ---	1.00 1.00	---	11.00 11.77	5.00 5.32	5.37 ---	16.90 17.14	326
334	Calumet Brand Ammoniated Dissolved Pure Bone and Potash-----	Claimed. Found.	2.00 1.95	7.06 ---	10.00 11.74	12.44 ---	1.00 1.05	---	11.00 12.79	2.00 3.16	3.19 ---	20.13 22.97	334
372	Calumet Brand 14% Acid Phosphate-----	Claimed. Found.	---	---	14.00 16.54	17.53 ---	1.00 1.00	---	15.00 17.37	---	---	14.84 17.53	372
427	Calumet Brand Sure Growth Fertilizer-----	Claimed. Found.	1.00 1.00	3.62 ---	8.00 9.19	9.74 ---	1.00 1.00	---	9.00 10.09	2.00 2.78	2.81 ---	14.39 16.17	427

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Available.	Insoluble.	Total Percent.	Percent.	Value.		
	HIRSH, STEIN & COMPANY, CHICAGO, ILL.—Concluded.	1912.										
456	Calumet Brand Potato, Tobacco and Onion Grower -----	Claimed. Found.	2.00 2.25	8.15 10.32	8.00 9.74	1.00 0.90	0.24	9.00 10.64	5.00 *6.00	--- 7.56	22.29 26.27	456
457	Calumet Brand 10-10 Hummer Potash Phosphate -----	Claimed. Found.	--- ---	10.00 11.52	10.00 10.87	1.00 0.90	---	11.00 11.77	10.00 10.10	--- 10.20	20.70 21.72	457
460	Calumet Brand Grain Grower -----	Claimed. Found.	2.00 1.85	6.70 11.43	8.00 10.78	1.00 1.02	0.28	9.00 11.80	2.00 *2.91	--- 3.67	18.51 22.08	460
461	Calumet Brand Special Potato, Tobacco and Onion Grower -----	Claimed. Found.	2.00 2.45	8.87 ---	8.00 7.52	1.00 2.20	0.59	9.00 9.72	*10.00 *10.08	--- 12.70	28.59 30.13	461
480	Calumet Brand Fruit and Truck Grower -----	Claimed. Found.	5.00 4.60	16.65 8.84	8.00 8.34	1.00 0.77	0.21	9.00 9.11	7.00 7.49	--- 7.56	33.92 33.26	480
497	Calumet Brand Extra Bone Meal -----	Claimed. Found.	2.43 2.50	9.05 16.68	15.74 a13.43	---	7.25	28.00 29.17	---	---	27.28 32.98	497

HOLDEN, W. F., ASHTABULA, O.		1912.										
428	The Ashtabula Fertilizer	Claimed. Found.	2.50 4.40	15.93 11.14	10.50 11.81	11.81 a8.24	10.00 4.45	20.50 19.38	---	---	25.58 32.19	428
HOWELL PROVISION COMPANY, THE G. E., NEWARK, O.		1912.										
296	Howell's Corn and Oats Special	Claimed. Found.	1.00 1.10	3.98 8.00	8.00 9.28	9.84 2.36	1.00 2.64	9.00 11.64	2.00 1.95	---	14.39 16.43	296
307	Howell's Potato and General Crop Grower	Claimed. Found.	1.00 1.00	3.62 8.70	8.00 8.70	9.22 2.49	0.67 4.32	9.00 11.19	4.00 4.32	---	16.41 17.87	307
309	Howell's Truck Grower	Claimed. Found.	3.00 2.95	10.68 6.00	6.00 7.67	8.13 1.15	0.31 1.00	7.00 8.82	10.00 11.55	---	27.59 30.79	309
451	Howell's Animal Tankage, Phosphate and Potash	Claimed. Found.	2.00 2.00	7.24 8.00	8.00 9.33	9.89 2.74	0.74 1.00	9.00 12.07	2.00 2.17	---	18.01 20.06	451
452	Thorn's Potash and Acid Mixture	Claimed. Found.	---	---	12.00 13.60	14.42 r1.00	---	13.00 14.17	5.00 5.06	---	17.77 19.53	452
605	Howell's Dissolved Phosphate	Claimed. Found.	---	---	14.00 15.80	16.75 r0.51	---	15.00 16.31	---	---	14.84 16.75	605
606	Howell's 16%	Claimed. Found.	---	---	16.00 17.79	18.86 r1.46	---	17.00 19.25	---	---	16.96 18.86	606
607	Howell's Phosphate and Potash	Claimed. Found.	---	---	10.00 10.74	11.38 r1.00	---	11.00 11.64	2.00 1.97	---	12.62 13.37	607
INDEPENDENT PACKERS' FERTILIZING COMPANY, THE, COLUMBUS, O.		1912.										
268	Number Three—Corn, Wheat, Oats and Clover	Claimed. Found.	1.00 1.13	4.09 8.25	8.00 8.25	8.75 0.57	0.15 ---	8.82 ---	4.03 4.03	---	16.14 17.06	268

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.	Percent.	Value.	Insoluble.	Percent.	Value.		
	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, O.—Concluded.	1912.										
275	Number Five—Special Grain and Grass Grower	Claimed. Found.	2.00 1.65	5.97	8.00 9.00	0.90 0.90	0.24 0.24		2.00 2.24		17.74 18.01	275
276	Number Nine—Soluble Phosphate	Claimed. Found.			14.00 15.42						14.84 16.35	276
284	Number Two—General Crop	Claimed. Found.	1.00 0.98	3.55	7.00 7.80				3.00 3.37		14.07 15.43	284
285	Number Four—Tobacco, Potato, Onion and Truck Special	Claimed. Found.	1.00 1.30	4.71	6.00 6.33				8.00 8.57		18.06 20.22	285
286	Number Ten—Potash Mixture	Claimed. Found.			9.00 8.82				5.00 3.65		14.59 13.04	286
+D-286	Number Ten—Potash Mixture	Claimed. Found.			9.00 10.93				5.00 4.27		14.59 15.90	D 286
+D-286	Number Ten—Potash Mixture	Claimed. Found.			9.00 10.68				5.00 5.03		14.59 16.40	D 286

287	Number Eight—Phosphate and Potash-----	Claimed. Found.	---	---	10.00	---	---	---	---	---	2.00	---	12.62
†D- 287	Number Eight—Phosphate and Potash-----	Claimed. Found.	---	---	8.82	9.35	r0.13	---	---	---	2.31	2.33	11.68 287
†D- 287	Number Eight—Phosphate and Potash-----	Claimed. Found.	---	---	10.00	---	---	---	---	---	2.00	---	12.62 D
†D- 287	Number Eight—Phosphate and Potash-----	Claimed. Found.	---	---	10.11	10.72	r0.38	---	---	---	2.66	2.69	13.41 287
308	Number Six—Truck and Black Soil Special-----	Claimed. Found.	---	---	10.00	---	---	---	---	---	2.00	---	12.62 D
			---	---	10.23	10.84	r0.32	---	---	---	2.42	2.44	13.28 287
			---	---	8.00	---	---	---	---	---	10.00	---	22.20
			---	---	8.62	9.14	0.77	0.21	---	---	10.20	10.30	23.45 308
322	Number Twelve—Bone Meal and Phosphate Mixture -----	Claimed. Found.	---	---	10.00	---	---	---	---	---	3.00	---	20.49
			---	---	9.55	10.12	7.52	2.03	---	---	4.43	4.47	21.51 322
337	Number Seven—Corn and Wheat Special-----	Claimed. Found.	---	---	8.00	---	---	---	---	---	2.00	---	14.12
			---	---	8.63	9.15	0.83	0.22	---	---	2.91	2.94	16.47 337
431	Number Eleven—Special Sugar Beet Grower-----	Claimed. Found.	---	---	8.00	---	---	---	---	---	4.00	---	16.41
			---	---	7.88	8.35	0.90	0.24	---	---	4.61	4.66	17.96 431
545	High Grade Phosphate-----	Claimed. Found.	---	---	16.00	---	---	---	---	---	---	---	16.96
			---	---	16.57	17.56	r0.06	---	---	---	---	---	17.56 545
INTERNATIONAL AGRICULTURAL COR- PORATION, BUFFALO FERTILIZER WORKS, BUFFALO, N. Y., AND CINCINNATI, O.													
126	Corn and Grain Grower-----	Claimed. Found.	---	---	10.00	---	---	---	---	---	5.00	---	15.65
†D- 126	Corn and Grain Grower-----	Claimed. Found.	---	---	9.49	10.06	r0.87	---	---	---	5.01	5.06	15.12 126
			---	---	10.00	---	---	---	---	---	5.00	---	15.65 D
			---	---	9.92	10.52	r1.08	---	---	---	5.07	5.12	15.64 126

† Note—These analyses are published at the request of the Manufacturer who was not satisfied with the first analyses of these brands. These duplicate samples were collected by a regular inspector of this Department and not furnished by the Manufacturer.

* From sulphate.

† Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.	Insoluble.	Total Percent.		Percent.	Value.		
		1912.										
	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, O.—Concluded.											
275	Number Five—Special Grain and Grass Grower	Claimed. Found.	2.00 1.65	5.97	8.00 9.00	— —	— —	— —	2.00 2.24	— 2.26	17.74 18.01	275
276	Number Nine—Soluble Phosphate	Claimed. Found.	— —	— —	14.00 15.42	— —	— —	— —	— —	— —	14.84 16.35	276
284	Number Two—General Crop	Claimed. Found.	1.00 0.98	3.55	7.00 7.80	— —	— —	— —	3.00 3.37	— 3.40	14.07 15.43	284
285	Number Four—Tobacco, Potato, Onion and Truck Special	Claimed. Found.	1.00 1.30	4.71	6.00 6.33	— —	— —	— —	8.00 8.57	— 8.66	18.06 20.22	285
286	Number Ten—Potash Mixture	Claimed. Found.	— —	— —	9.00 8.82	— —	— —	— —	5.00 3.65	— 3.69	14.59 13.04	286
†D-286	Number Ten—Potash Mixture	Claimed. Found.	— —	— —	9.00 10.93	— —	— —	— —	5.00 4.27	— 4.31	14.59 15.90	D 286
†D-286	Number Ten—Potash Mixture	Claimed. Found.	— —	— —	9.00 10.68	— —	— —	— —	5.00 5.03	— 5.08	14.59 16.40	D 286

287	Number Eight—Phosphate and Potash	Claimed. Found.	10.00	8.82	9.35	r0.13	2.00	2.33	12.62	287
+D- 287	Number Eight—Phosphate and Potash	Claimed. Found.	10.00	10.11	10.72	r0.38	2.00	2.69	12.62	D 287
+D- 287	Number Eight—Phosphate and Potash	Claimed. Found.	10.00	10.23	10.84	r0.32	2.00	2.42	12.62	D 287
308	Number Six—Truck and Black Soil Special	Claimed. Found.	1.00	3.80	8.62	9.14	0.77	0.21	22.20	308
322	Number Twelve—Bone Meal and Phosphate Mixture	Claimed. Found.	1.00	1.35	4.89	9.55	10.12	2.03	20.49	322
337	Number Seven—Corn and Wheat Special	Claimed. Found.	1.00	1.15	4.16	8.63	9.15	0.83	14.12	337
431	Number Eleven—Special Sugar Beet Grower	Claimed. Found.	1.00	1.30	4.71	8.00	7.88	8.35	16.41	431
545	High Grade Phosphate	Claimed. Found.	16.00	16.57	17.56	r0.06	16.63	16.96	17.56	545
	INTERNATIONAL AGRICULTURAL CORPORATION, BUFFALO FERTILIZER WORKS, BUFFALO, N. Y., AND CINCINNATI, O.	1912.								
126	Corn and Grain Grower	Claimed. Found.	10.00	9.49	10.06	r1.00	11.00	5.00	15.65	126
+D- 126	Corn and Grain Grower	Claimed. Found.	10.00	9.92	10.52	r1.08	11.00	5.07	15.65	D 126

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* From sulphate.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
		1912.										
127	INTERNATIONAL AGRICULTURAL CORPORATION, BUFFALO FERTILIZER WORKS, BUFFALO, N. Y., AND CINCINNATI, O.— Concluded.	Claimed. Found.	2.00 2.55	9.23	8.00 8.76	9.29	1.00 1.85	0.50	10.00 10.18	10.28	26.00 29.30	127
183		Claimed. Found.	— —	— —	14.00 15.72	16.66	11.00 10.84	— —	— —	— —	14.84 16.66	183
184		Claimed. Found.	— —	— —	9.00 8.69	9.21	11.00 11.53	— —	3.00 3.03	3.06	12.57 12.27	184
†D-184		Claimed. Found.	— —	— —	9.00 8.76	9.29	11.00 12.30	— —	3.00 3.46	3.49	12.57 12.78	D 184
185		Claimed. Found.	1.00 1.15	4.16	9.00 8.64	9.16	1.00 1.85	0.50	2.00 3.51	3.55	15.45 17.37	185
186		Claimed. Found.	1.50 1.55	5.61	8.00 7.93	8.41	1.00 1.53	0.41	2.50 5.80	5.86	16.71 20.29	186

187	Farmers' Choice	Claimed. Found.	1.00 1.25	4.53	8.00 9.39	9.95	1.00 1.28	---	9.00 10.67	5.00 5.16	---	17.42 20.04	187
188	Bone Meal	Claimed. Found.	3.50 3.80	13.76	---	15.47	7.23	---	22.00 21.82	---	---	27.19 33.13	188
199	Garden Truck	Claimed. Found.	4.00 3.85	13.94	8.00 8.86	9.39	1.00 1.50	---	9.00 10.36	7.00 7.11	7.18	30.30 30.92	199
257	Ideal Wheat and Corn	Claimed. Found.	2.00 1.78	6.44	9.00 10.17	10.78	1.00 1.21	---	10.00 11.38	5.00 4.86	---	22.10 22.46	257
490	16% Acid Phosphate	Claimed. Found.	---	---	16.00 16.96	17.98	1.46	---	18.42	---	---	16.96 17.98	490
INTERNATIONAL SEED COMPANY, ROCHESTER, N. Y.													
405	International Potato and Truck Manure	Claimed. Found.	1.50 1.50	5.43	8.00 8.56	9.07	0.77	---	9.50 9.33	7.00 6.99	7.06	20.98 21.77	405
424	International Grain and Grass Grower	Claimed. Found.	1.50 1.70	---	10.00 10.62	---	---	---	11.50 11.70	2.50 2.37	---	18.56 20.09	424
JARECKI CHEMICAL COMPANY, THE, SANDUSKY AND CINCINNATI, O.													
75	C. O. D. Phosphate	Claimed. Found.	---	---	14.00 16.53	17.52	1.00 1.80	---	15.00 17.33	---	---	14.84 17.52	75
94	Lake Erie Guano with Phosphate and Potash	Claimed. Found.	1.50 1.60	---	8.00 9.78	10.37	1.00 0.77	---	9.00 10.55	2.50 2.71	---	16.71 19.11	94
95	Square Brand Phosphate and Potash	Claimed. Found.	---	---	10.00 10.99	---	1.00 1.02	---	11.00 12.01	2.00 1.98	---	12.62 13.65	95

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a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
													Total Percent.
	JARECKI CHEMICAL COMPANY, THE, SANDUSKY AND CINCINNATI, O.— Concluded.	1912.											
96	Fish, Phosphate and Potash, Tobacco and Potato Food-----	Claimed. Found.	1.00	---	8.00	---	1.00	---	9.00	---	4.00	---	16.41
			1.10	3.98	8.85	9.38	0.29	0.08	3.35	3.38	16.82		
97	Super-Phosphate and Potash-----	Claimed. Found.	---	---	10.00	---	1.00	---	11.00	---	4.00	---	14.64
			---	---	10.54	11.17	0.77	---	3.95	3.99	15.16		
145	Number One Formula-----	Claimed. Found.	1.00	---	8.00	---	1.00	---	9.00	---	2.00	---	14.39
			1.13	4.09	9.59	10.17	0.90	0.24	2.12	2.14	16.64		
407	High Potash Mixture-----	Claimed. Found.	1.00	---	6.00	---	1.00	---	7.00	---	8.00	---	18.33
			1.08	3.91	6.17	6.54	0.41	0.11	8.25	8.33	18.89		
422	Black Soil Special-----	Claimed. Found.	---	---	8.00	---	1.00	---	9.00	---	8.00	---	16.56
			---	---	9.52	10.09	0.77	---	6.97	7.04	17.13		
536	Raw Bone and Phosphate Mixture-----	Claimed. Found.	2.00	---	10.00	---	6.00	---	16.00	---	1.00	---	22.09
			2.35	8.51	11.52	12.21	7.86	2.12	1.47	1.48	24.32		

630	Tobacco and Truck Grower-----	Claimed. Found.	2.00 2.00	7.24 7.51	6.00 7.96	1.00 0.70	0.19 0.19	7.00 8.21	6.00 6.18	6.24 6.24	19.93 21.63	630
LOUISVILLE FERTILIZER COMPANY, LOUISVILLE, KY., AND NASHVILLE, TENN.												
258	Eagle Tobacco Grower-----	Claimed. Found.	3.00 2.75	8.00 8.63	8.00 9.15	0.75 1.15	0.31 0.31	9.78 9.78	6.00 5.47	6.89 6.89	27.10 26.31	258
408	Eagle Grain Grower-----	Claimed. Found.	1.00 1.05	7.00 8.95	7.00 9.49	0.75 0.38	0.10 0.10	9.33 9.33	4.00 2.68	2.71 2.71	15.28 16.10	408
571	Eagle Potash Special-----	Claimed. Found.	1.00 0.95	7.00 7.00	7.00 7.42	0.75 0.99	0.27 0.27	7.99 7.99	7.00 7.44	7.51 7.51	18.31 16.64	571
597	Eagle Corn and Wheat Grower-----	Claimed. Found.	1.00 1.25	8.00 9.71	8.00 10.29	0.75 0.90	0.24 0.24	10.61 10.61	2.00 1.83	2.31 2.31	14.82 17.37	597
MACE & MANSFIELD, GREENVILLE, O.												
384	Perfection Crop-Maker and Potash-----	Claimed. Found.	--- ---	11.00 13.43	11.00 14.24	2.00 2.05	--- ---	13.00 15.48	2.00 0.29	--- 0.29	13.68 14.53	384
572	Big Crop-Maker and Potash-----	Claimed. Found.	--- ---	10.00 10.51	10.00 11.14	2.00 2.17	--- ---	12.00 12.68	3.00 4.64	--- 4.69	13.63 15.83	572
573	Tip Top Super-Phosphate-----	Claimed. Found.	--- ---	14.00 14.64	14.00 15.52	2.00 2.43	--- ---	15.00 17.07	--- ---	--- ---	14.84 15.52	573
574	Diamond Brand Tobacco and Vegetable-----	Claimed. Found.	1.00 1.10	6.00 6.53	6.00 6.92	2.00 0.57	--- 0.15	8.00 7.10	8.00 8.44	--- 8.52	18.60 19.57	574
576	Mace's Prizetaker Tobacco and Potato Special-----	Claimed. Found.	1.00 1.15	8.00 8.95	8.00 9.38	2.00 2.87	--- ---	10.00 9.72	4.00 4.66	--- 4.71	16.68 18.25	576

* From sulphate.

^a Wholly from animal matter. ^r Wholly from rock.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	MARIETTA BONE & PHOSPHATE CO., THE, MARIETTA, O.	1912.										
299	One, Eight and Eight-----	Claimed. Found.	1.00 1.03	--- 3.73	8.00 7.30	--- 7.74	2.00 1.85	10.00 9.15	8.00 7.13	--- 7.20	20.72 19.17	299
589	Potato and Truck Special-----	Claimed. Found.	2.50 2.13	--- 7.71	8.00 7.53	--- 7.98	2.00 2.87	10.00 10.40	6.00 6.34	--- 6.40	24.13 22.86	589
590	Corn, Oats and Wheat Grower-----	Claimed. Found.	1.00 1.25	--- 4.53	8.00 7.67	--- 8.13	2.00 2.11	10.00 9.78	2.00 2.93	--- 2.96	14.66 16.19	590
641	Buckeye -----	Claimed. Found.	1.50 1.20	--- 4.34	8.00 8.44	--- 8.95	2.00 2.94	10.00 11.38	3.00 2.72	--- 2.75	17.48 16.83	641
	MARTIN COMPANY, D. B., PHILA- DELPHIA, PA.	1912.										
90	Martin's Dissolved Organic Compound-----	Claimed. Found.	1.25 1.20	--- 4.34	9.00 8.63	--- 9.15	--- 1.40	--- 10.03	2.00 2.42	--- 2.44	16.09 16.31	90
144	Martin's Special Potato Manure-----	Claimed. Found.	1.00 1.05	--- 3.80	8.00 7.96	--- 8.44	--- 1.18	--- 9.14	5.00 4.92	--- 4.97	17.15 17.53	144

200	Martin's Prize Potato.....	Claimed. Found.	2.00 1.60	5.79 8.19	8.00 8.68	1.02 ---	0.28 ---	9.21 ---	10.00 7.28	7.35 ---	25.82 22.10	200
201	Martin's Potash and Soluble Phosphate.....	Claimed. Found.	---	12.00 12.18	12.91 12.91	10.06 ---	---	12.24 ---	5.00 4.77	4.82 ---	17.77 17.73	201
202	Martin's Acid Phosphate.....	Claimed. Found.	---	14.00 14.78	15.67 15.67	10.06 ---	---	14.84 ---	---	---	14.84 15.67	202
404	Martin's Pure Ground Bone.....	Claimed. Found.	2.00 2.05	7.42 11.39	12.07 12.07	11.57 ---	6.25 ---	22.90 22.96	---	---	22.35 25.74	404
513	Martin's Corn and Cereal Special.....	Claimed. Found.	2.00 1.70	6.15 9.42	9.99 9.99	1.86 ---	0.50 ---	11.28 ---	2.00 2.84	2.87 ---	17.74 19.51	513
635	Martin's Pure Animal Bone and Potash.....	Claimed. Found.	2.00 2.05	7.42 11.20	11.87 11.87	5.56 ---	1.50 ---	16.76 ---	2.50 2.16	2.18 ---	26.73 22.97	635
MENDELSON REDUCTION CO., THE, ELYRIA, O.												
397	Pure Animal Fertilizer.....	Claimed. Found.	5.75 4.65	9.53 16.83	6.33 6.71	6.46 6.71	2.31 ---	15.99 10.61	---	---	34.41 25.85	397
MILLER, E. L., WASHINGTON C. H., O.												
509	Corn and Wheat Grower.....	Claimed. Found.	1.00 2.25	9.00 8.15	9.72 10.30	1.00 6.78	1.83 ---	10.00 16.50	2.00 3.37	3.40 ---	15.45 23.68	509
626	Dahl's Special	Claimed. Found.	2.00 2.20	7.96 13.05	13.83 13.83	3.00 5.94	1.60 ---	13.00 18.99	2.00 2.35	2.37 ---	20.67 25.76	626

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Total Percent.	Percent.			Value.
					Percent.	Value.	Percent.	Value.					
	MORRIS & COMPANY, CHICAGO, ILL.	1912.											
232	Big Four	Claimed. Found.	5.00 4.70	17.01	7.00 9.89	10.48	5.00 2.69	12.00 12.58	4.00 4.61	33.26 34.03	232		
233	Big Five	Claimed. Found.	3.00 3.35	12.13	7.00 8.76	9.29	3.00 2.17	10.00 10.93	1.00 1.22	21.16 23.55	233		
234	Big Six—Special Bone Meal and Potash	Claimed. Found.	0.50 0.90	3.26	10.56	11.19	4.22	16.00 14.78	2.00 2.12	14.89 19.40	234		
235	Big Seven—Special Bone Meal and Potash	Claimed. Found.	1.50 1.60	5.79	12.79	13.56	3.39	16.00 16.18	3.00 5.19	19.77 27.72	235		
236	Big Twelve—Prepared Manure with Phosphate and Potash	Claimed. Found.	1.00 1.70	6.15	7.00 8.12	8.61	2.00 0.70	9.00 8.82	3.00 3.20	15.36 18.98	236		
273	Big Nine—Prepared Manure with Phosphate and Potash	Claimed Found.	1.00 1.70	6.15	7.00 9.56	10.13	2.00 0.57	9.00 10.13	7.00 7.07	20.40 25.34	273		
365	Big Eleven—Bone Meal and Potash	Claimed. Found.	1.00 1.05	3.80	10.42	11.05	3.58	16.00 14.00	10.00 12.45	26.78 32.43	365		

453	Big Three -----	Claimed. Found.	3.00 3.50	12.67 -----	6.00 8.89	----- 9.42	4.00 1.85	----- 0.50	10.00 10.74	*2.00 *2.03	----- 2.56	21.90 25.15	453
534	Big Ten-Prepared Manure with Phosphate and Potash -----	Claimed. Found.	2.00 2.30	----- 8.33	8.00 11.45	----- 12.14	2.00 1.82	----- 0.49	10.00 13.27	*2.00 *2.14	----- 2.70	18.78 23.66	534
	MUSKINGUM VALLEY FERTILIZER CO., THE, MARIETTA, O.	1912.											
15	Peerless Brand Special Vegetable Grower -----	Claimed. Found.	1.50 1.05	----- 3.80	9.00 12.09	----- 12.82	1.00 0.70	----- 0.19	10.00 12.79	6.00 6.15	----- 6.21	21.30 23.02	15
16	Peerless Brand Acid Phosphate and Potash -----	Claimed. Found.	----- -----	----- -----	10.00 11.69	----- 12.39	1.00 0.26	----- -----	11.00 11.95	2.00 2.12	----- 2.14	12.62 14.53	16
297	Peerless Brand Corn, Oats and Wheat Fer- tilizer -----	Claimed. Found.	1.00 0.93	----- 3.37	10.00 12.41	----- 13.15	1.00 1.02	----- 0.28	11.00 13.43	1.50 1.36	----- 1.37	16.01 18.17	297
	NATURAL GUANO COMPANY, AUBORA, ILL.	1912.											
593	Sheep's Head Brand of Pulverized Sheep Manure -----	Claimed. Found.	2.25 2.80	----- 10.14	1.50 1.53	----- 1.62	----- 0.19	----- 0.10	1.75 1.72	1.50 *1.94	----- 2.44	11.63 14.30	593
355	NEW PROCESS FERTILIZER CO., THE, COLUMBUS, O.	1912.											
355	Killebrew's Chief -----	Claimed. Found.	----- -----	----- -----	10.00 11.13	----- 11.80	----- 0.38	----- -----	10.00 11.51	5.00 5.34	----- 5.39	15.65 17.19	355
356	Big Chief -----	Claimed. Found.	1.00 1.20	----- 4.34	8.00 9.72	----- 10.30	----- 1.79	----- 0.48	8.00 11.51	4.00 4.75	----- 4.80	16.14 19.92	356
386	Acme Chief -----	Claimed. Found.	2.00 2.30	----- 8.33	8.00 9.69	----- 10.27	----- 1.82	----- 0.49	8.00 11.51	8.00 8.07	----- 8.15	23.80 27.24	386
542	Brown Chief -----	Claimed. Found.	----- -----	----- -----	10.00 10.90	----- 11.55	----- 0.48	----- -----	10.00 11.38	2.00 2.51	----- 2.54	12.62 14.09	542

* From sulphate.

a Wholly from animal matter. r Wholly from rock.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
NEW PROCESS FERTILIZER CO., THE, COLUMBUS, O.—Concluded.												
1912.												
543	Wheeler's Chief	Claimed. Found.	1.00 1.30	4.71	8.00 8.70	9.22	2.23	0.60	2.00 2.70	2.73	14.12 17.26	543
544	Black Chief	Claimed. Found.	2.00 2.25	8.15	8.00 8.32	8.82	3.25	0.88	3.00 4.07	4.11	18.75 21.96	544
582	Humus Chief	Claimed. Found.	— —	— —	14.00 16.38	17.36	10.57	— —	— —	— —	14.84 17.36	582
583	Acme Special Chief	Claimed. Found.	2.00 2.20	7.96	7.00 8.31	8.81	1.66	0.45	10.00 10.37	10.47	24.76 27.69	583
NITRATE AGENCIES COMPANY, NEW YORK, N. Y., AND CHICAGO, ILL.												
1912.												
336	High Grade Acid Phosphate	Claimed. Found.	— —	— —	16.00 17.02	18.04	11.46	— —	— —	— —	16.96 18.04	336
580	Acid Phosphate	Claimed. Found.	— —	— —	14.00 17.37	18.41	10.70	— —	— —	— —	14.84 18.41	580

PACKERS FERTILIZER CO., THE, CINCINNATI, O.										1912.										
498	Animal Tankage, Phosphate and Potash-----										Claimed. Found.	1.00 1.20	4.34 8.00	9.29 9.85	0.61 1.00	0.16 0.16	9.00 9.90	4.00 4.38	4.42 16.41	18.77 498
499	Phosphate with Humus-----										Claimed. Found.	0.50 0.65	12.00 13.75	14.58 14.58	0.70 0.70	13.00 14.45	----- -----	----- -----	14.53 16.93	499
500	Super-Phosphate and Potash-----										Claimed. Found.	----- -----	10.00 11.00	----- 11.66	0.70 0.70	11.00 12.46	4.00 4.49	4.53 16.19	14.64 500	
561	Potato, Tobacco and Truck Manure-----										Claimed. Found.	2.00 2.25	6.00 6.97	7.39 7.39	1.00 0.64	7.00 7.61	6.00 *6.34	7.99 23.70	21.43 561	
636	Ammoniated Phosphate-----										Claimed. Found.	1.00 1.10	8.00 10.30	10.92 10.92	1.00 0.83	9.00 11.13	2.00 1.85	1.87 16.99	14.39 636	
637	Sweepstakes-----										Claimed. Found.	1.50 1.75	8.00 8.88	9.41 9.41	1.00 0.96	9.00 9.84	2.50 2.49	2.51 18.52	16.71 637	
PIEDMONT-MT. AIRY GUANO COMPANY, BALTIMORE, MD.										1912.										
21	Piedmont High Grade Acid Phosphate-----										Claimed. Found.	----- -----	14.00 15.29	16.21 16.21	0.44 0.44	15.00 15.73	----- -----	----- -----	14.84 16.21	21
22	Piedmont Phosphate and Potash Mixture-----										Claimed. Found.	----- -----	10.00 11.25	11.93 11.93	0.50 0.10	5.00 11.35	4.58 4.63	15.65 16.56	22	
282	Piedmont Acidulated Phosphate and Potash for all Crops-----										Claimed. Found.	----- -----	10.00 9.59	10.17 10.17	0.50 0.06	2.00 9.65	1.96 1.98	12.62 12.15	282	
283	Piedmont Perfection Fertilizer-----										Claimed. Found.	2.00 1.95	8.00 9.33	9.89 9.89	1.00 -----	9.00 9.33	5.00 5.15	5.20 22.15	21.04 283	
293	Piedmont Harvest Queen-----										Claimed. Found.	1.00 1.00	8.00 9.58	10.15 10.15	1.00 0.32	9.00 9.90	2.00 2.03	2.05 15.91	14.39 293	

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a Wholly from animal matter.
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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

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			Value.		Available.		Insoluble.		Percent.	Value.			Total Percent.
					Percent.	Value.	Percent.	Value.					
	PIEDMONT-MT. AIEY GUANO COMPANY, BALTIMORE, MD.—Concluded.	1912.											
312	Piedmont Plow Brand-----	Claimed. Found.	2.00 1.65	5.97	8.00 8.89	9.42	1.00 0.19	0.05	2.00 2.62	2.65	18.01 18.09	312	
313	Piedmont Tobacco and Potato Compound-----	Claimed. Found.	2.00 1.75	6.34	6.00 8.05	8.53	1.00 0.26	0.07	10.00 8.24	8.32	23.97 23.26	313	
333	Piedmont Farmers' Favorite-----	Claimed. Found.	1.00 0.90	3.26	8.00 9.40	9.96	1.00 0.19	0.05	4.00 4.44	4.48	16.41 17.75	333	
388	Piedmont Special for Grain and Grass-----	Claimed. Found.	1.00 1.50	5.43	9.00 9.33	9.89	1.00 0.26	0.07	3.00 4.36	4.40	16.46 19.79	388	
584	Piedmont Champion Fertilizer-----	Claimed. Found.	1.00 0.88	3.19	8.00 10.81	11.46	1.00 0.19	---	7.00 5.80	5.86	19.44 20.51	584	
	PIONEER FERTILIZER COMPANY, CHI- CAGO, ILL. AND CLEVELAND, O.	1912.											
18	Pioneer 10-2 Fertilizer-----	Claimed. Found.	--- ---	---	10.00 11.03	--- 11.69	1.00 0.48	---	2.00 1.68	1.70	12.62 13.39	18	

45	Pioneer General Crop Grower-----	Claimed. Found.	2.00 2.15	7.78	8.00 9.09	--- 9.64	a1.00 1.46	--- 0.39	9.00 10.55	2.00 2.45	--- 2.47	18.28 20.28	45
46	Pioneer 10-8 Fertilizer-----	Claimed. Found.	--- ---	--- ---	10.00 9.74	--- 10.32	r1.00 r0.93	--- ---	11.00 10.67	8.00 7.03	--- 7.10	18.68 17.42	46
47	Pioneer High Grade Phosphate and Potash-----	Claimed. Found.	--- ---	--- ---	10.00 11.07	--- 11.73	r1.00 r0.44	--- ---	11.00 11.51	4.00 3.07	--- 3.10	14.64 14.83	47
49	Pioneer High Grade Acid Phosphate-----	Claimed. Found.	--- ---	--- ---	14.00 14.45	--- 15.32	r1.00 r0.77	--- ---	15.00 15.22	--- ---	--- ---	14.84 15.32	49
71	Pioneer Potato and Vegetable Grower-----	Claimed. Found.	2.00 1.90	6.88	8.00 9.65	--- 10.23	a1.00 0.32	--- 0.09	9.00 9.97	7.00 *6.34	--- 7.99	25.08 25.19	71
72	Pioneer Truck and Corn Grower-----	Claimed. Found.	1.00 1.15	4.16	8.00 8.95	--- 9.49	a1.00 0.26	--- 0.07	--- 9.21	4.00 3.45	--- 3.48	16.68 17.20	72
73	Pioneer 3-8-5 Fertilizer-----	Claimed. Found.	3.00 2.95	10.68	8.00 9.66	--- 10.24	a1.00 0.83	--- 0.22	9.00 10.49	5.00 4.26	--- 4.30	24.93 25.44	73
74	Pioneer Grain Fertilizer-----	Claimed. Found.	1.00 1.20	4.34	8.00 8.79	--- 9.32	a1.00 0.26	--- 0.07	9.00 9.05	2.00 1.85	--- 1.87	14.66 15.60	74
PITTSBURGH PROVISION & PACKING CO., PITTSBURGH, PA.													
358	Corn and Potato Fertilizer-----	Claimed. Found.	1.75 1.75	6.34	9.00 9.33	--- 9.89	a2.00 0.90	--- 0.24	11.00 10.23	3.00 2.70	--- 2.73	19.99 19.20	358
359	Keystone Fertilizer-----	Claimed. Found.	1.75 2.15	7.78	9.00 9.59	--- 10.17	a2.00 1.21	--- 0.33	11.00 10.80	1.50 1.79	--- 1.81	18.48 20.09	359
588	Special Potato Fertilizer-----	Claimed. Found.	2.00 1.80	6.52	9.00 10.94	--- 11.60	a1.00 0.44	--- 0.12	10.00 11.38	7.00 10.08	--- 10.18	24.39 28.42	588

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
PORTSMOUTH CHEMICAL COMPANY, THE, PORTSMOUTH, O.												
1912.												
340	Peerless Brand Popular	Claimed. Found.	2.00 2.43	8.00 8.80	8.00 8.75	9.28	1.00 3.39	0.92	12.14	2.00 2.30	18.01 21.32	340
341	Peerless Brand Phosphate	Claimed. Found.	----- -----	----- -----	14.00 14.46	15.33	10.50 11.40	----- -----	15.86	----- -----	14.84 15.33	341
342	Peerless Brand Bone Meal, Phosphate and Potash	Claimed. Found.	1.00 1.50	12.00 5.43	12.00 10.21	10.82	1.00 2.71	0.73	12.92	2.00 5.45	18.63 22.48	342
394	Peerless Brand Perfection	Claimed. Found.	2.00 2.40	----- 8.69	8.00 7.76	8.23	1.00 3.49	----- 0.94	----- 11.25	10.00 10.22	26.09 28.18	394
609	Peerless Brand Truck, Potato and Tobacco	Claimed. Found.	3.00 2.80	----- 10.14	8.00 9.40	9.96	1.00 3.25	----- 0.88	----- 12.65	6.00 6.40	25.67 27.44	609
610	Peerless Brand Moneysworth	Claimed. Found.	1.00 1.05	----- 3.80	8.00 6.72	7.12	1.00 1.08	----- 0.29	----- 7.80	2.00 2.26	14.39 13.49	610

PULVERIZED MANURE COMPANY, THE, CHICAGO ILL.		1912.										
354	Wizard Brand Manure-----	2.10	1.00	---	---	---	---	---	---	---	---	---
		3.80	1.33	13.76	1.41	0.13	0.07	1.00	1.97	1.99	9.67	354
415	Wizard Brand Concentrated Plant Food-----	3.00	6.00	---	---	---	---	6.00	2.00	---	19.74	415
		4.55	6.46	16.47	6.85	0.51	0.14	6.97	*3.78	4.76	28.22	415
QUEEN CITY FERTILIZER COMPANY CINCINNATI O.		1912.										
248	Lion Phosphate-----	---	14.00	---	---	11.00	---	15.00	---	---	14.84	248
		---	16.31	---	17.29	10.96	---	17.27	---	---	17.29	248
378	Phosphate and Potash-----	---	10.00	---	---	11.00	---	11.00	2.00	---	12.62	378
		---	10.10	---	10.71	11.47	---	11.57	2.82	2.85	13.56	378
429	Valley Gem Phosphate-----	1.00	8.00	---	---	1.00	---	9.00	2.00	---	14.39	429
		1.20	9.08	4.34	9.62	1.15	0.31	10.23	2.35	2.37	16.64	429
430	Big Bonanza Tobacco and Potato Grower-----	1.00	8.00	---	---	1.00	---	9.00	4.00	---	16.41	430
		1.15	9.20	4.16	9.75	0.83	0.22	10.03	3.80	3.84	17.97	430
BAUH & SONS FERTILIZER CO., E. INDIANAPOLIS, IND.		, 1912.										
387	Fearless-----	1.00	8.00	---	---	---	---	---	8.00	---	20.18	387
		1.20	8.05	4.34	8.53	1.79	0.48	9.84	7.19	7.26	20.61	387
398	Corn and Wheat Grower-----	1.00	8.00	---	---	---	---	---	2.00	---	14.12	398
		1.10	9.18	3.98	9.73	2.30	0.62	11.48	2.31	2.33	16.66	398
538	Our Special-----	2.00	10.00	---	---	---	---	---	6.00	---	23.90	538
		2.15	11.35	7.78	12.03	3.26	0.88	14.61	6.05	6.11	26.80	538
546	Half and Half with Potash-----	1.20	8.00	---	---	---	---	16.00	5.00	---	20.03	546
		1.40	7.63	5.07	8.09	10.12	2.73	17.75	5.72	5.75	21.67	546

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
		1912.										
657	RAUH & SONS FERTILIZER CO., E. IN. DIANAPOLIS, IND.—Concluded.	Red Star Phosphate Claimed. Found.									14.84	657
					14.00	17.49	10.90	17.40			17.49	
658	Phosphate and Potash	Claimed. Found.			16.50						12.62	658
					10.00	11.93	11.15	12.40	2.00	2.37	14.30	
659	Grain Grower	Claimed. Found.			11.25						14.64	659
					10.00	12.05	11.21	12.58	4.00	4.51	16.56	
660	Rauh's Choice	Claimed. Found.			11.37						17.74	660
			2.00	7.78	8.00	10.30	2.05	11.77	2.00	1.85	20.48	
		1912.										
347	RICKARD, G. W., MEDINA, O. Manufactured by The Smith Agricultural Chemical Co., Columbus, O. Rickard's Best Phosphate	Claimed. Found.									21.88	347
			2.00	7.24	10.00	11.77	0.67	11.77	4.00	5.69	24.88	

348	Rickard's Dissolved Phosphate and Potash	Claimed. Found.	---	---	12.00	---	---	---	---	4.00	---	16.76	348
			---	---	11.83	12.54	r0.83	---	12.66	3.91	3.95	16.49	
349	Rickard's Dissolved Phosphate	Claimed. Found.	---	---	14.00	---	---	---	---	---	---	14.84	349
			---	---	14.58	15.45	r1.21	---	15.79	---	---	15.45	
	RUEHLE & COMPANY, JOHN, DEFAANCE, OHIO.	1912.											
520	Mixed Fertilizer with Potash	Claimed. Found.	2.00 2.10	7.60	3.00 3.39	---	1.00 4.41	---	4.00 7.80	6.00 15.18	---	16.75 27.71	520
	SLOVER FERTILIZER CO., THE EDW., CAMDEN, O.	1912.											
617	Tobacco and Truck	Claimed. Found.	1.00 1.10	3.98	8.00 6.84	---	1.00 0.83	---	9.00 7.67	7.00 8.67	---	19.44 20.21	617
618	Favorite	Claimed. Found.	2.00 2.33	8.43	9.00 7.49	---	3.00 3.23	---	12.00 10.72	2.50 3.45	---	20.93 20.72	618
624	Wheat Special	Claimed. Found.	1.00 0.90	3.26	9.00 10.49	---	1.00 1.15	---	10.00 11.64	2.00 2.55	---	15.45 17.27	624
625	Fourteen	Claimed. Found.	---	---	14.00	---	r1.00	---	15.00	---	---	14.84	625
			---	---	16.34	17.32	r0.77	---	17.11	---	---	17.32	
	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, OHIO.	1912.											
32	Special Potato Formula	Claimed. Found.	1.00 1.20	4.34	6.00 7.47	---	---	---	10.00 8.24	10.00 10.56	---	20.08 23.14	32
33	Black Soil Formula	Claimed. Found.	---	---	10.00	---	---	---	12.98	10.00	---	20.70	33
			---	---	11.52	12.21	r1.46	---	11.98	11.98	12.10	24.31	

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, O.—Continued.	1912.										
221	Bone Meal with Phosphate and Potash-----	Claimed. Found.	1.00 1.18	4.27	15.00 15.61	16.55	5.00 4.99	1.35	20.60	2.00 *1.69	23.39 24.30	221
448	Vegetable Formula -----	Claimed. Found.	4.00 3.95	14.30	6.00 6.94	7.36	0.64	0.17	7.58	7.00 7.26	27.91 29.16	448
346	Abbott & Martin's York Special-----	Claimed. Found.	1.00 1.10	3.98	8.00 8.82	9.35	r0.77	9.59	7.00 6.92	6.99	19.17 20.32	346
409	Abbott & Martin's Dissolved Phosphate and Potash -----	Claimed. Found.	----- -----	-----	10.00 10.42	11.05	r0.96	11.38	5.00 5.69	5.75	15.65 16.80	409
410	Abbott & Martin's Universal Fertilizer-----	Claimed. Found.	1.00 1.05	3.80	8.00 8.73	9.25	1.08	0.29	9.81	4.00 4.11	16.14 17.49	410
479	Abbott & Martin's Star Phosphate-----	Claimed. Found.	----- -----	-----	10.00 11.12	11.79	r0.77	11.89	2.00 2.31	2.33	12.62 14.12	479
512	Abbott & Martin's Hercules Phosphate-----	Claimed. Found.	----- -----	-----	14.00 13.43	14.24	r0.90	14.33	----- -----	-----	14.84 14.24	512

541	Abbott & Martin's Peerless Phosphate and Potash	Claimed. Found.	1.00 1.05	3.80 ---	8.00 8.69	9.21 ---	r1.46 ---	---	---	2.00 2.24	---	14.12 15.27	541
225	Buckeye Extra Super-Phosphate.	Claimed. Found.	---	---	14.00 15.23	16.14 ---	r1.02 ---	---	---	---	---	14.84 16.14	225
226	Buckeye Sterling Formula	Claimed. Found.	---	---	10.00 10.10	10.71 ---	r0.83 ---	---	---	5.00 5.83	---	15.65 16.60	226
227	Buckeye Complete Fertilizer	Claimed. Found.	1.00 1.15	4.16 ---	8.00 8.76	9.29 ---	---	0.29	9.84	2.00 1.95	---	14.12 15.71	227
228	Buckeye Grain Grower	Claimed. Found.	2.00 2.00	7.24 ---	8.00 8.95	9.49 ---	0.83 ---	0.22	9.78	2.00 2.58	---	17.74 19.56	228
229	Buckeye Special Phosphate and Potash Mixture	Claimed. Found.	1.00 1.00	3.62 ---	8.00 8.82	9.35 ---	0.90 ---	0.24	9.72	4.00 4.20	---	16.14 17.45	229
230	Buckeye Champion Phosphate	Claimed. Found.	1.00 1.30	4.71 ---	8.00 8.40	8.90 ---	r0.96 ---	---	---	7.00 7.23	---	19.17 20.91	230
411	Buckeye Electric Phosphate	Claimed. Found.	2.00 1.95	7.06 ---	8.00 8.51	9.02 ---	0.70 ---	0.19	9.21	4.00 3.76	---	19.76 20.07	411
425	Buckeye Wheat Maker	Claimed. Found.	---	---	10.00 11.14	11.81 ---	r0.87 ---	---	---	2.00 2.60	---	12.62 14.44	425
34	Chicago Fertilizer Co.'s New Leader	Claimed. Found.	1.00 1.30	4.71 ---	8.00 8.91	9.44 ---	r0.96 ---	---	---	7.00 8.05	---	19.17 22.28	34
98	Chicago Fertilizer Co.'s Diamond Phosphate	Claimed. Found.	---	---	14.00 15.12	16.03 ---	r0.77 ---	---	13.89	---	---	14.84 16.03	98
99	Chicago Fertilizer Co.'s Diamond Phosphate and Potash	Claimed. Found.	---	---	10.00 10.36	10.98 ---	r0.77 ---	---	---	5.00 5.64	---	15.65 16.68	99
100	Chicago Fertilizer Co.'s Western Phosphate and Potash	Claimed. Found.	1.00 1.10	3.98 ---	8.00 9.04	9.58 ---	0.99 ---	0.27	10.03	2.00 2.41	---	14.12 16.26	100

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Total Percent.	Percent.			Value.
					Percent.	Value.	Percent.	Value.					
	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, O.—Continued.	1912.											
176	Chicago Fertilizer Co.'s Calumet Phosphate.	Claimed. Found.	10.00 10.48	11.11	10.77		11.25	2.00 2.60	2.63	12.62 13.74	176		
177	Chicago Fertilizer Co.'s Potash Special.	Claimed. Found.	1.00 1.15	4.16	10.90		10.03	4.00 4.42	4.46	16.14 18.30	177		
222	Chicago Fertilizer Co.'s Potato, Truck and Tobacco Fertilizer.	Claimed. Found.	2.00 2.15	7.78	0.90	0.24	9.27	4.00 4.14	4.18	19.76 21.07	222		
426	Chicago Fertilizer Co.'s B. B. and P. Brand.	Claimed. Found.	2.00 1.95	7.06	1.28	0.35	10.15	2.00 2.06	2.08	17.74 18.89	426		
101	Hardy's Corn and Wheat Grower.	Claimed. Found.	1.00 1.15	4.16	1.15	0.31	10.15	2.00 2.33	2.35	14.12 16.36	101		
223	Hardy's Phosphate and Potash.	Claimed. Found.	10.00 10.77	11.42	10.67		11.44	2.00 2.85	2.88	12.62 14.30	223		
224	Hardy's Potash Fertilizer.	Claimed. Found.	1.00 1.10	3.98	1.08	0.29	9.78	4.00 4.20	4.24	16.14 17.73	224		

279	Hardy's Acme Phosphate.....	Claimed. Found.	---	---	10.00	---	---	10.57	---	---	---	---	5.00	---	15.85	279
311	Hardy's Imperial Phosphate.....	Claimed. Found.	1.00	---	8.00	---	---	---	---	---	---	---	7.00	---	19.17	311
608	Hardy's Tankage, Phosphate and Potash.....	Claimed. Found.	1.15	4.16	8.82	9.35	0.90	0.24	---	---	---	---	7.71	7.79	21.54	608
642	Hardy's Security Phosphate.....	Claimed. Found.	2.00	---	8.00	---	---	---	---	---	---	---	2.00	---	17.74	642
29	Ohio Farmer's Alkaline Phosphate.....	Claimed. Found.	1.65	5.97	8.38	8.88	1.50	0.41	---	---	---	---	2.35	2.37	17.63	29
30	Ohio Farmer's Climax Phosphate.....	Claimed. Found.	---	---	14.00	---	---	---	---	---	---	---	---	---	14.84	30
31	Ohio Farmer's Ammoniated Phosphate and Potash.....	Claimed. Found.	---	---	16.11	17.08	---	---	---	---	---	---	---	---	17.08	31
35	Ohio Farmer's Corn, Oats and Wheat Fertilizer.....	Claimed. Found.	---	---	14.00	17.02	---	---	---	---	---	---	---	---	14.84	35
178	Ohio Farmer's Soluble Phosphate and Potash.....	Claimed. Found.	---	---	16.06	17.02	---	---	---	---	---	---	---	---	17.02	178
179	Ohio Farmer's Wheat Maker and Seeding Down.....	Claimed. Found.	---	---	10.00	12.74	---	---	---	---	---	---	---	---	15.65	179
180	Ohio Farmer's Potato and Tobacco Special.....	Claimed. Found.	---	---	12.02	12.74	---	---	---	---	---	---	---	---	18.62	180
181	Ohio Farmer's Excelsior Phosphate.....	Claimed. Found.	1.00	---	8.00	---	---	---	---	---	---	---	---	---	16.14	181
119	Western Chemical Dissolved Phosphate.....	Claimed. Found.	0.95	3.44	9.22	9.77	0.93	0.25	---	---	---	---	4.00	---	17.62	119
			2.00	---	8.00	---	---	---	---	---	---	---	4.12	4.16	17.62	
			2.10	7.60	9.07	9.61	---	---	---	---	---	---	2.00	---	17.74	
			---	---	10.00	12.60	---	---	---	---	---	---	2.60	2.63	19.84	
			---	---	11.89	12.60	---	---	---	---	---	---	2.00	---	12.62	
			1.00	---	8.00	---	---	---	---	---	---	---	3.34	3.37	15.97	
			1.20	4.34	8.88	9.41	1.02	0.28	---	---	---	---	2.00	---	14.12	
			2.00	---	8.00	---	---	---	---	---	---	---	2.08	---	16.13	
			2.10	7.60	8.86	9.39	---	---	---	---	---	---	4.00	---	19.76	
			1.00	---	8.00	---	---	---	---	---	---	---	4.32	4.36	21.35	
			1.25	4.53	8.62	9.14	---	---	---	---	---	---	7.00	---	19.17	
			---	---	14.00	---	---	---	---	---	---	---	7.38	7.45	21.12	
			---	---	14.77	15.66	---	---	---	---	---	---	---	---	14.84	
			---	---	---	---	---	---	---	---	---	---	---	---	15.66	

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Available.	Insoluble.	Total Percent.	Percent.	Value.		
	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, O.—Concluded.	1912.										
120	Western Chemical Acidulated Phosphate	Claimed. Found.	10.00 10.94	11.60	10.70			11.64	2.00 2.53	2.56	12.62 14.16	120
121	Western Chemical Royal Phosphate	Claimed. Found.	10.00 10.52	11.15	10.67			11.19	5.00 5.72	5.78	15.65 16.93	121
122	Western Chemical Pioneer Seed Maker	Claimed. Found.	1.00 1.40	5.07	8.00 9.47	10.04	0.83	10.30	2.00 3.05	3.08	14.12 18.41	122
123	Western Chemical Standard Phosphate	Claimed. Found.	2.00 2.05	7.42	8.00 9.02	9.56		9.72	2.00 2.57	2.60	17.74 19.58	123
124	Western Chemical Eric Phosphate	Claimed. Found.	1.00 1.15	4.16	8.00 8.75	9.28		9.65	4.00 4.34	4.38	16.14 17.82	124
182	Western Chemical Gem Phosphate	Claimed. Found.	1.00 1.30	4.71	8.00 8.95	9.49		9.59	7.00 6.86	6.93	19.17 21.13	182
643	Western Chemical Crop Producer	Claimed. Found.	2.00 2.20	7.96	8.00 8.89	9.42	2.11	11.00	4.00 4.64	4.69	19.76 22.64	643

TABLE 1—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	STANDARD GUANO COMPANY, BALTIMORE, MD.	1912.										
304	Great Grain Grower-----	Claimed. Found.	1.00 1.10	3.98 9.61	8.00 9.07	9.61 9.61	0.50 0.90	8.50 9.97	4.00 5.08	16.28 18.96	304	
305	Alkaline Mixture-----	Claimed. Found.	----- -----	----- 11.87	10.00 11.20	11.87 11.87	0.50 0.44	10.50 11.64	4.00 5.63	14.64 17.56	305	
471	Mammoth Potato Special-----	Claimed. Found.	2.00 2.50	9.05 9.61	8.00 9.07	9.61 9.61	0.50 1.02	8.50 10.09	10.00 8.57	25.96 27.60	471	
472	Fish and Potash Guano-----	Claimed. Found.	1.00 1.80	6.52 10.75	9.00 10.14	10.75 10.75	0.60 1.02	9.60 11.16	2.00 1.35	15.34 18.91	472	
473	High Grade Acid Phosphate-----	Claimed. Found.	----- -----	----- 16.51	14.00 15.58	16.51 16.51	0.50 0.54	14.50 16.12	----- -----	14.84 16.51	473	
579	Ideal Guano*-----	Claimed. Found.	2.00 1.80	6.52 11.93	9.00 11.25	11.93 11.93	0.50 1.15	9.50 12.40	4.00 4.71	20.96 23.52	579	

STEDMAN COMPANY, THE F. C., ATHENS, OHIO.		1912.											
474	Acme -----	Claimed. Found.	7.80 6.35	22.99	6.59 6.78	7.19	a6.84 a7.55	4.08	13.43 14.33	0.62 0.46	0.46	39.55 34.72	474
SWIFT & COMPANY, CHICAGO, ILL., AND CLEVELAND, OHIO.		1912.											
27	Swift's Grain Fertilizer-----	Claimed. Found.	1.00 1.20	4.34	8.00 8.62	9.14	a1.00 0.26	0.07	9.00 8.88	2.00 1.89	1.91	14.66 15.46	27
36	Swift's Super-Phosphate -----	Claimed. Found.	2.00 2.15	7.78	8.00 10.62	11.26	a1.00 0.44	0.12	9.00 11.06	2.00 2.18	2.20	18.28 21.36	36
37	Swift's Onion, Potato and Tobacco Fertilizer-	Claimed. Found.	2.00 2.05	7.42	8.00 8.88	9.41	a1.00 0.13	0.04	9.00 9.01	7.00 *6.94	8.74	25.08 25.61	37
38	Swift's Truck Grower-----	Claimed. Found.	1.00 1.10	3.98	8.00 8.50	9.01	a1.00 0.32	0.09	9.00 8.82	4.00 3.57	3.61	16.68 16.69	38
39	Swift's Champion Wheat and Corn Grower---	Claimed. Found.	2.00 2.25	8.15	12.00 13.65	14.47	a1.00 0.74	0.20	13.00 14.39	2.00 2.26	2.28	22.52 25.10	39
40	Swift's Garden City Phosphate-----	Claimed. Found.	-----	-----	14.00 14.97	15.87	r1.00 r0.70	-----	15.00 15.67	-----	-----	14.84 15.87	40
41	Swift's Diamond "P" Fertilizer-----	Claimed. Found.	-----	-----	8.00 8.69	9.21	r1.00 r0.90	-----	9.00 9.59	3.00 2.70	2.73	11.51 11.94	41
154	Swift's High Grade Phosphate and Potash---	Claimed. Found.	-----	-----	10.00 10.93	11.59	r1.00 r0.38	-----	11.00 11.31	4.00 3.70	3.74	14.64 15.33	154
237	Swift's Early Potato and Vegetable Grower---	Claimed. Found.	4.00 3.70	13.39	6.00 7.60	8.06	a1.00 0.90	0.24	7.00 8.50	10.00 9.16	9.25	31.48 30.94	237

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

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TABLE I—MIXED FERTILIZERS—Continued.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
	SWIFT & COMPANY, CHICAGO, ILL., AND CLEVELAND, OHIO.—Concluded.	1912.										
249	Swift's Potato, Celery and Onion Grower	Claimed. Found.	1.00 0.95	3.44	5.00 6.52	6.91	a1.00 0.32	6.00 6.84	10.00 8.65	8.74	19.56 19.18	249
271	Swift's Special Phosphate and Potash	Claimed. Found.	— —	— —	10.00 9.61	10.19	r1.00 r0.54	11.00 10.15	2.00 2.10	2.12	12.62 12.31	271
343	Swift's Diamond "G" Fertilizer	Claimed. Found.	— —	— —	10.00 10.10	10.71	r1.00 r0.96	11.00 11.06	8.00 7.55	7.63	18.68 18.34	343
344	Swift's Pulverized Sheep Manure	Claimed. Found.	3.00 3.85	13.94	3.65 a0.51	3.37	— 0.28	2.00 4.16	2.00 1.47	1.48	14.20 19.57	344
518	Swift's Special Potato Fertilizer	Claimed. Found.	2.00 2.15	7.78	8.00 8.25	8.75	a1.00 0.57	9.00 8.82	10.00 11.18	11.29	26.36 27.97	518
598	Swift's Diamond "A" Fertilizer	Claimed. Found.	3.00 3.00	10.86	8.00 8.31	8.81	a1.00 1.15	9.00 9.46	3.00 3.27	3.30	22.91 23.28	598
599	Swift's Diamond "B" Fertilizer	Claimed. Found.	3.00 3.10	11.22	8.00 8.98	9.32	a1.00 0.77	9.00 9.75	5.00 4.78	4.83	24.93 25.78	599

TENNESSEE CHEMICAL CO., LOUISVILLE, KY. AND NASHVILLE, TENN.													
		1912.											
262	Ox Corn and Wheat Grower-----	Claimed. Found.	1.00 1.45	5.25	8.00 7.99	8.47	0.75 0.51	0.14	8.50	2.00 *2.22	2.80	14.82 16.66	262
263	Ox Potash Special-----	Claimed. Found.	1.00 1.05	3.80	7.00 7.73	8.19	0.75 0.51	0.14	8.24	7.00 6.80	6.87	18.31 19.00	263
437	Ox Grain Grower-----	Claimed. Found.	1.00 1.20	4.34	7.00 9.25	9.81	0.75 0.90	0.24	10.15	4.00 *3.84	4.84	16.28 19.23	437
449	Ox Potash Mixture-----	Claimed. Found.	----- -----	-----	10.00 11.06	----- 11.72	r0.50 r1.08	-----	-----	2.00 1.99	2.01	12.62 13.73	449
510	Ox High Grade Dissolved Phosphate-----	Claimed. Found.	----- -----	-----	14.00 14.97	15.87	r0.50 r0.44	-----	15.41	-----	-----	14.84 15.87	510
THOMAS & SON COMPANY, I. P., PHILADELPHIA, PA.													
350	Potato, Tobacco and Corn-----	Claimed. Found.	2.00 1.98	7.17	8.00 8.81	9.34	1.34	0.36	10.15	5.00 *4.95	6.24	22.02 23.11	350
351	Victor Potash Manure-----	Claimed. Found.	1.00 1.25	4.53	8.00 8.66	9.18	0.80	0.22	9.46	5.00 5.09	5.14	17.15 19.07	351
352	Thomas' Wheat and Corn-----	Claimed. Found.	1.00 1.40	5.07	9.00 9.11	9.66	1.08	0.29	10.19	3.00 3.68	3.72	16.19 18.74	352
353	Thomas' Triumph -----	Claimed. Found.	1.00 1.05	3.80	8.00 10.35	10.97	0.96	0.26	11.31	2.00 2.72	2.75	14.12 17.78	353
504	Improved Super-Phosphate -----	Claimed. Found.	1.00 1.15	4.16	9.00 7.86	8.33	0.83	0.22	8.69	2.00 2.97	3.00	15.18 15.71	504
516	Special Alkaline Fertilizer-----	Claimed. Found.	----- -----	-----	10.00 9.97	10.57	r1.00 r0.70	-----	10.67	4.00 4.55	4.60	14.64 15.17	516

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.	Insoluble.	Total Percent.	Value.	Percent.	Value.		
540	THOMAS & SON COMPANY, I. P., PHILADELPHIA, PA.—Concluded.	1912.										
		Claimed. Found.		14.00 15.61				r1.00 r0.38			14.84 16.55	540
587	Ohio Grain and Sugar Beet	Claimed. Found.	1.00 1.25						4.00 4.01		15.08 18.07	587
		1912.		7.00 8.75								
146	TUSCARORA FERTILIZER COMPANY, Manufactured by Armour Fertilizer Works, Chicago, Ill.	Claimed. Found.	2.00 2.15						2.00 2.04		17.94 18.79	146
		1912.		8.00 8.11				0.75 1.28				
147	Soluble Phosphate and Potash	Claimed. Found.		10.00 10.42				r0.50 r0.96			14.64 15.14	147
		1912.										
163	Tuscarora Chief	Claimed. Found.	1.00 1.20						4.00 4.53		16.34 17.71	163
		1912.		8.00 7.93				0.75 1.40				

164	Tuscarora Fruit and Potato-----	Claimed. Found.	2.00 2.15	7.78	8.00	-----	0.75 1.40	-----	-----	9.27	10.00 10.10	-----	26.02 26.70	164
165	Acid Phosphate -----	Claimed. Found.	-----	-----	14.00 15.29	-----	0.50 0.32	-----	-----	15.61	-----	-----	14.84 16.21	165
525	1-8-2 Fertilizer -----	Claimed. Found.	1.00 1.15	4.16	8.00 7.28	-----	0.75 0.96	-----	-----	8.24	2.00 2.45	-----	14.32 14.61	525
526	Big Four -----	Claimed. Found.	2.00 1.63	5.90	7.00 6.91	-----	0.75 1.40	-----	-----	8.31	4.00 5.43	-----	18.90 19.08	526
UNITED FERTILIZER COMPANY, CHICAGO, ILL.														
464	Evergreen Brand Flour and Lawn Fertilizer-----	Claimed. Found.	9.72 10.63	38.48	14.50 14.33	-----	-----	-----	-----	15.73	15.00 14.16	-----	69.46 71.89	464
VIRGINIA-CAROLINA CHEMICAL CO., CINCINNATI, OHIO.														
502	V. C. Acid and Potash King-----	Claimed. Found.	-----	-----	10.00 10.74	-----	-----	-----	-----	11.25	4.00 4.38	-----	14.64 15.80	502
503	V. C. Champion Corn and Wheat Grower-----	Claimed. Found.	1.00 1.15	4.16	8.00 9.08	-----	1.50 1.92	-----	-----	11.00	2.00 2.39	-----	14.53 16.71	503
505	V. C. Wheat, Corn and Tobacco Grower-----	Claimed. Found.	1.00 1.30	4.71	8.00 8.57	-----	1.50 1.66	-----	-----	10.23	4.00 5.41	-----	16.55 19.70	505
506	V. C. Grain Food-----	Claimed. Found.	-----	-----	10.00 10.54	-----	-----	-----	-----	11.31	2.00 2.26	-----	12.62 13.45	506
539	V. C. Complete Fertilizer-----	Claimed. Found.	2.00 2.05	7.42	8.00 8.88	-----	1.50 1.92	-----	-----	10.80	2.00 2.71	-----	18.15 20.09	539

* From sulphate.

a Wholly from animal matter. r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	VIRGINIA-CAROLINA CHEMICAL CO., CINCINNATI, OHIO.—Concluded.	1912.										
577	V. C. Diamond Potash Formula for Wheat and Corn-----	Claimed. Found.	0.50 0.53	1.92 12.48	9.00 11.77	1.50 1.28	0.35	13.05	5.00 3.70	16.81 18.49	577	
663	V. C. High Grade Acid Phosphate-----	Claimed. Found.	----- -----	----- 15.05	14.00 14.20	----- 11.15	-----	15.35	----- -----	14.84 15.05	663	
	WELCH FERTILIZER COMPANY, THE, COLUMBUS, OHIO.	1912.										
294	Welch's General Crop-----	Claimed. Found.	1.00 0.88	3.19 10.17	8.00 9.59	----- 0.64	0.17	10.23	4.00 4.12	16.14 17.69	294	
295	Welch's Potash Special-----	Claimed. Found.	----- -----	----- 10.37	10.00 9.78	----- 10.38	-----	10.16	2.00 1.89	12.62 12.28	295	
475	Welch's Grain Grower-----	Claimed. Found.	1.00 1.10	3.98 7.00	8.00 6.60	----- 0.70	0.19	7.30	2.00 2.28	14.21 13.47	475	
476	Welch's Potash Compound-----	Claimed. Found.	----- -----	----- 10.71	9.00 10.10	----- 10.19	-----	10.29	5.00 4.95	14.59 15.71	476	

578	Welch's Standard Corn and Wheat	Claimed. Found.	2.00 1.20	4.34	8.00 7.74	8.20	1.21	0.33	8.95	2.00 3.16	3.19	17.74 16.06	578
664	Welch's Favorite	Claimed. Found.	1.00 1.68	6.08	11.00 12.19	12.92	0.67	0.18	12.86	3.00 4.54	4.59	18.31 23.77	664
665	Welch's Soluble Phosphate	Claimed. Found.	---	---	14.00 13.75	14.58	11.28	---	15.03	---	---	14.84 14.58	665
WESTERN UNION CHEMICAL COMPANY, CLEVELAND, OHIO.													
89	Grain and Grass Grower	Claimed. Found.	---	---	10.00 9.98	10.58	11.50 11.79	---	11.50 11.77	2.00 2.22	2.24	12.62 12.82	89
329	Grain and Potato Grower	Claimed. Found.	1.00 1.25	4.53	8.00 9.15	9.70	1.50 1.21	0.33	9.50 10.36	4.00 4.35	4.39	16.55 18.95	329
330	Dissolved Phosphate and Potash	Claimed. Found.	---	---	10.00 10.93	11.59	11.50 12.30	---	11.50 13.23	5.00 5.30	5.35	16.65 16.94	330
522	Corn and Wheat Grower	Claimed. Found.	1.00 1.45	5.25	8.00 9.33	9.89	1.50 1.28	0.35	9.50 10.61	2.00 2.54	2.57	14.53 18.06	522
537	Tiger Bone Meal	Claimed. Found.	3.00 3.45	12.49	11.21	11.88 ^a	10.67	5.76	20.00 21.88	---	---	24.06 30.13	537
547	International Phosphate	Claimed. Found.	---	---	14.00 14.15	15.00	11.50 12.74	---	15.50 16.89	---	---	14.84 15.00	547
600	Vegetable and Tobacco Manure	Claimed. Found.	1.00 1.20	4.34	8.00 8.94	9.48	1.50 1.21	0.33	9.50 10.15	7.00 7.47	7.54	19.58 21.69	600
WUICHEL FERTILIZER CO., THE, DAYTON, OHIO.													
171	Ruby Phosphate	Claimed. Found.	1.00 1.20	4.34	9.00 10.69	11.33	1.00 1.89	---	---	1.00 1.08	---	14.44 17.27	171

^a Wholly from animal matter.^r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

* From sulphate.

TABLE I—MIXED FERTILIZERS—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
VIRGINIA-CAROLINA CHEMICAL CO., CINCINNATI, OHIO.—Concluded.												
577	V. C. Diamond Potash Formula for Wheat and Corn-----	1912. Claimed. Found.	0.50 0.53	1.92	9.00 11.77	12.48	1.50 1.28	13.05	5.00 3.70	3.74	16.81 18.49	577
663	V. C. High Grade Acid Phosphate-----	Claimed. Found.	----- -----	----- -----	14.00 14.20	15.05	11.15	15.35	----- -----	----- -----	14.84 15.05	663
WELCH FERTILIZER COMPANY, THE, COLUMBUS, OHIO.												
294	Welch's General Crop-----	Claimed. Found.	1.00 0.88	3.19	8.00 9.59	10.17	0.64	10.23	4.00 4.12	4.16	16.14 17.69	294
295	Welch's Potash Special-----	Claimed. Found.	----- -----	----- -----	10.00 9.78	10.37	10.38	10.16	2.00 1.89	1.91	12.62 12.28	295
475	Welch's Grain Grower-----	Claimed. Found.	1.00 1.10	3.98	8.00 6.60	7.00	0.70	7.30	2.00 2.28	2.30	14.21 13.47	475
476	Welch's Potash Compound-----	Claimed. Found.	----- -----	----- -----	9.00 10.10	10.71	10.19	10.29	5.00 4.95	5.00	14.59 15.71	476

578	Welch's Standard Corn and Wheat	Claimed. Found.	2.00 1.20	4.34	8.00 7.74	8.20	1.21	0.33	8.95	2.00 3.16	3.19	17.74 16.06	578
664	Welch's Favorite	Claimed. Found.	1.00 1.68	6.08	11.00 12.19	12.92	0.67	0.18	12.86	3.00 4.54	4.59	18.31 23.77	664
665	Welch's Soluble Phosphate	Claimed. Found.	---	---	14.00 13.75	14.58	1.28	---	15.03	---	---	14.84 14.58	665
WESTERN UNION CHEMICAL COMPANY, CLEVELAND, OHIO.													
89	Grain and Grass Grower	Claimed. Found.	---	---	10.00 9.98	10.58	1.50 1.79	---	11.50 11.77	2.00 2.22	---	12.62 12.82	89
329	Grain and Potato Grower	Claimed. Found.	1.00 1.25	4.53	8.00 9.15	9.70	1.50 1.21	0.33	9.50 10.36	4.00 4.35	4.39	16.55 18.95	329
330	Dissolved Phosphate and Potash	Claimed. Found.	---	---	10.00 10.93	11.59	1.50 2.30	---	11.50 13.23	5.00 5.30	---	16.65 16.94	330
522	Corn and Wheat Grower	Claimed. Found.	1.00 1.45	5.25	8.00 9.33	9.89	1.50 1.28	0.35	9.50 10.61	2.00 2.54	2.57	14.53 18.06	522
537	Tiger Bone Meal	Claimed. Found.	3.00 3.45	12.49	11.21	11.88	10.67	5.76	20.00 21.88	---	---	24.06 30.13	537
547	International Phosphate	Claimed. Found.	---	---	14.00 14.15	15.00	1.50 2.74	---	15.50 16.89	---	---	14.84 15.00	547
600	Vegetable and Tobacco Manure	Claimed. Found.	1.00 1.20	4.34	8.00 8.94	9.48	1.50 1.21	0.33	9.50 10.15	7.00 7.47	7.54	19.58 21.69	600
WUICHERT FERTILIZER CO., THE, DAYTON, OHIO.													
171	Ruby Phosphate	Claimed. Found.	1.00 1.20	4.34	9.00 10.69	11.33	1.00 1.89	0.51	12.58	1.00 1.08	1.09	14.44 17.27	171

^a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

* From sulphate.

TABLE I—MIXED FERTILIZERS—Concluded.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent	Value.	Percent	Value.	Insoluble.	Total Percent.	Percent.	Value.		
		1912.										
172	WUICHET FERTILIZER CO., THE, DAYTON, OHIO—Concluded.	Claimed. Found.									16.96 17.98	172
196	Buckeye Phosphate		2.00 1.68	6.08	8.00 9.60	10.18	1.00 2.74	0.74	8.00 7.19	7.26	24.07 24.26	196
197	Onion and Truck	Claimed. Found.	1.00 0.90	3.26	5.00 8.18	8.67	1.00 0.83	0.22	11.00 9.30	9.39	20.30 21.54	197
198	Potash Special	Claimed. Found.	1.00 1.00	3.62	9.00 10.43	11.06	1.00 2.68	0.72	3.00 2.78	2.81	16.46 18.21	198
216	Miami Phosphate	Claimed. Found.	2.00 2.05	7.42	9.00 8.44	8.95	1.00 1.59	0.43	2.00 2.49	2.51	19.07 19.31	216
373	Spot Cash	Claimed. Found.	1.00 1.10	3.98	8.00 9.12	9.67	1.00 1.37	0.37	5.00 5.30	5.35	17.42 19.37	373
433	Gem Phosphate	Claimed. Found.	2.00 1.85	6.70	8.00 9.79	10.38	6.00 4.02	1.09	1.50 1.75	1.77	18.86 19.94	433
	Raw Bone and Phosphate	Claimed. Found.										

YOUNGSTOWN FERTILIZER CO., THE, YOUNGSTOWN, OHIO.		1912.											
562	Buckeye State Crop Grower-----	Claimed. Found.	2.00 2.20	7.96 8.90	8.00 8.90	9.43 9.43	a1.00 1.59	0.43 0.43	9.00 10.49	2.00 3.45	3.48 3.48	18.28 21.30	562
563	Prize Potato and Vegetable Grower-----	Claimed. Found.	2.00 2.35	8.51 8.95	7.00 8.95	9.49 9.49	a1.00 1.72	0.46 0.46	8.00 10.67	10.00 10.45	10.55 10.55	25.30 29.01	563
564	High Grade Acid Phosphate-----	Claimed. Found.	----- -----	----- -----	16.00 18.52	19.63 19.63	----- r0.19	----- -----	----- 18.71	----- -----	----- -----	16.96 19.63	564
565	Star Grain Grower-----	Claimed. Found.	1.00 1.50	5.43 5.43	8.00 7.85	8.32 8.32	a1.00 0.84	0.23 0.23	9.00 8.69	2.00 3.28	3.31 3.31	14.66 17.29	565

a Wholly from animal matter. r Wholly from rock. * From sulphate.
 Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

TABLE II—BONES.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	In Fine Bone.	Percent.	Value.	In Med. Bone.	Percent.	Value.		
514	ALLIANCE FERTILIZER CO., THE, ALLIANCE, OHIO. Pure Raw Bone-----	1912.										
		Claimed. Found.	4.50 5.10	18.46	10.42	7.40	11.52	6.22	22.00 21.94		30.81 32.08	514
102	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CINCINNATI, O. Bowker Fertilizer Works. Bowker's Pure Ground Bone-----	1912.										
		Claimed. Found.	3.00 2.15	7.78	18.43	12.09	6.81	3.68	20.00 25.24		24.06 24.55	102
129	AMERICAN FERTILIZER CO., CHICAGO, ILL. "Union Brand" Pure Raw Bone Meal-----	1912.										
		Claimed. Found.	4.50 4.50	16.29	12.79	9.08	8.00	4.32	20.00 20.79		29.49 29.69	129
488	"Union Brand" Steamed Bone Meal-----	1912.										
		Claimed. Found.	1.00 1.55	5.61	18.64	13.23	10.27	5.55	30.00 28.91		23.42 24.39	488

489	"Union Brand" Special Bone Meal	Claimed. Found.	2.00 1.75	6.34	14.94	10.61	5.66	3.06	20.00 20.60	---	---	20.44 20.01	489
567	"Union Brand" Pure Bone Meal and Potash	Claimed. Found.	1.00 0.78	2.82	9.06	6.43	4.17	2.25	20.00 13.23	3.00 3.66	---	19.85 15.20	567
ARMOUR FERTILIZER WORKS, CHICAGO, ILL.													
53	Raw Bone Meal	Claimed. Found.	4.50 4.75	17.20	19.13	13.58	6.90	3.73	22.00 26.03	---	---	30.81 34.51	53
315	Armour's Bone Meal	Claimed. Found.	2.00 2.90	10.50	23.30	16.54	5.29	2.86	27.00 28.59	---	---	25.06 29.90	315
317	Bone Meal	Claimed. Found.	3.00 3.00	10.86	19.98	14.19	4.84	2.61	24.00 24.82	---	---	26.70 27.66	317
647	Mixed Bone and Potash	Claimed. Found.	2.00 2.25	8.15	17.81	12.65	1.76	0.95	18.00 19.57	4.00 4.76	---	23.16 26.56	647
BARTLETT, GEORGE S., NEWPORT, KY.													
492	Pure Bone Flour	Claimed. Found.	3.00 2.20	7.96	18.62	13.22	1.40	0.76	21.00 20.02	---	---	24.72 21.94	492
CANTON FERTILIZER & CHEMICAL CO., CANTON, OHIO.													
218	Peerless Bone Meal	Claimed. Found.	2.75 4.75	17.20	15.68	11.13	0.57	0.31	22.00 16.25	---	---	24.48 28.64	218
423	Peerless Pure Raw Bone	Claimed. Found.	4.00 4.25	15.39	9.48	6.73	9.48	5.12	22.00 18.96	---	---	29.00 27.24	423

* From sulphate.

TABLE II—BONES—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	In Fine Bone.	Percent.	Value.	In Med. Bone.	Percent.	Value.		
		1912.										
151	CENTRAL MANUFACTURING COMPANY, LOCKLAND, OHIO.	Equity Bone, Tankage and Potash	4.50	18.82	11.23	7.97	5.91	3.19	2.00	2.85	28.21	151
406		Equity Raw Bone Meal	3.50	15.20	13.92	9.88	6.11	3.30			27.85	406
	CINCINNATI PHOSPHATE COMPANY, THE, CINCINNATI, OHIO.	1912.									28.38	
532		Ground Bone	3.00	11.77	19.10	13.56	4.19	2.26			24.06	532
	DARLING & COMPANY, CHICAGO, ILL.	1912.									27.59	
450		Darling's Ground Raw Bone	4.00	17.38	15.84	11.25	8.34	4.50			28.34	450
478		Darling's Pure Ground Bone	2.25	7.96	21.64	15.36	7.02	3.79			33.13	478
		1912.	2.20	7.96	21.64	15.36	7.02	3.79			26.63	
											27.11	

524	Darling's Pure Bone and Potash	Claimed. Found.	2.00 2.20	7.96 19.41	13.78 5.47	2.95 24.25	6.00 5.88	29.31 30.63	524
	FRANK & SONS, L., ZANESVILLE, O.	1912.							
376	Bone Meal (Steamed)	Claimed. Found.	2.50 4.75	17.20 17.99	12.77 3.95	2.13 23.00	24.88 21.94	24.23 32.10	376
465	Pure Bone Meal (Raw)	Claimed. Found.	4.00 4.90	17.74 11.26	7.99 10.81	5.84 23.00	22.07	29.66 31.57	465
	GROVES COMPANY, THE, CINCINNATI, O.	1912.							
551	Pure Bone and Potash Mixture	Claimed. Found.	1.00 1.35	18.80 4.89	13.35 3.72	2.01 20.00	5.61 22.52	21.87 25.92	551
655	Pure Raw Bone	Claimed. Found.	4.00 6.05	21.90 12.99	9.22 8.31	4.49 22.00	21.30	29.00 35.61	655
	HAMM COMPANY, THE M., WASH- INGTON C. H., O.	1912.							
371	Bone Meal	Claimed. Found.	1.00 1.50	5.43 32.43	23.03 0.07	0.04 27.00	32.50	21.44 28.50	371
	HIRSH, STEIN & CO., CHICAGO, ILL.	1912.							
52	Calumet Brand Special Pure Bone Meal and Potash	Claimed. Found.	1.00 1.85	6.70 17.46	12.40 5.37	2.90 20.00	3.43 22.83	20.86 25.46	52
458	Calumet Brand Pure Raw Bone Meal	Claimed. Found.	4.50 4.75	17.20 6.22	4.42 15.59	8.42 20.00	21.81	29.49 30.04	458
459	Calumet Brand Special Pure Bone Meal	Claimed. Found.	1.00 1.80	6.79 16.51	11.72 14.54	7.91 29.77	31.15	23.27 25.42	459

* From sulphate.

TABLE II—BONES—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	In Fine Bone.	In Med. Bone.	Percent.	Value.		
462	HIRSH, STEIN & CO., CHICAGO, ILL.—Concluded. Calumet Brand Pure Bone Meal.	1912. Claimed. Found.	3.00								25.91	462
			3.00	10.86	16.19	11.49			6.46	3.49	25.84	
292	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, OHIO. Bone Meal	1912. Claimed. Found.	1.00								21.44	292
			1.05	3.80	28.49	20.23			2.48	1.34	25.37	
515	JARECKI CHEMICAL COMPANY, THE, SANDUSKY AND CINCINNATI, OHIO. Pure Ground Bone	1912. Claimed. Found.	3.00								24.06	515
			3.35	12.13	22.45	15.94			2.63	1.42	29.49	
288	LOUISVILLE FERTILIZER CO., LOUISVILLE, KY., AND NASHVILLE, TENN. Eagle Bone Meal	1912. Claimed. Found.	2.00								25.06	288
			2.90	10.50	25.06	17.79			1.74	0.94	29.23	
											27.00	
											26.80	

298	MARIETTA BONE & PHOSPHATE CO., THE, MARIETTA, OHIO.	1912. Claimed. Found.	4.50 4.65	16.83 10.05	7.14 10.68	5.77 20.73	29.49 29.74	298
231	MORRIS & COMPANY, CHICAGO, ILL.	1912. Claimed. Found.	2.50 2.80	10.14 20.71	6.54 14.70	3.53 27.25	27.53 28.37	231
631	Big One—Ground Raw Bone	Claimed. Found.	4.00 4.25	15.39 13.76	9.77 11.96	6.46 25.72	30.32 31.62	631
521	NITRATE AGENCIES CO., NEW YORK, N. Y., AND CHICAGO, ILL.	1912. Claimed. Found.	1.00 1.00	3.62 23.71	16.83 10.16	5.49 33.87	22.76 25.94	521
646	Fine Ground Bone	Claimed. Found.	3.00 2.90	10.50 19.66	3.88 13.96	2.10 23.54	25.96 26.56	646
48	PIONEER FERTILIZER COMPANY, CHI- CAGO, ILL., AND CLEVELAND, O.	1912. Claimed. Found.	3.00 3.00	10.86 19.65	6.04 13.95	3.26 25.69	26.70 28.07	48
616	Pioneer Bone Meal	Claimed. Found.	2.50 2.75	9.96 22.75	5.34 16.15	2.88 28.09	26.87 28.99	616
628	Pioneer 2½-27 Bone Meal	Claimed. Found.	2.00 2.25	8.15 18.64	3.68 13.23	1.99 22.32	20.44 23.37	628

* From sulphate.

TABLE II—BONES—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	In Fine Bone.	Percent.	Value.	In Med. Bone.	Percent.	Value.		
		1912.										
357	PITTSBURGH PROVISION & PACKING CO., PITTSBURGH, PA. No. 1. Pure Raw Bone Meal	Claimed.	4.50								30.81	357
		Found.	4.70	17.01	14.51	7.81	4.22				31.53	
		1912.										
611	PORTSMOUTH CHEMICAL CO., THE, PORTSMOUTH, OHIO. Peerless Brand Bone Meal	Claimed.	3.00								26.70	611
		Found.	4.35	15.75	15.13	6.49	3.50				29.99	
		1912.										
379	QUEEN CITY FERTILIZER COMPANY, CINCINNATI, O. Lion Bone Meal	Claimed.	3.00								24.06	379
		Found.	2.95	10.68	18.41	4.04	2.18				25.93	
		1912.										
125	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, OHIO. Bone Meal	Claimed.	2.00								20.44	125
		Found.	2.40	8.69	17.52	4.80	2.59				23.72	

SWIFT & COMPANY, CHICAGO, ILL., AND CLEVELAND, OHIO.									
	1912.								
28	Claimed. Found.	Swift's Pure Raw Bone Meal	4.50	18.10	12.14	8.62	11.66	6.30	23.00
			5.00						31.47
									33.02
42	Claimed. Found.	Swift's Ground Steamed Bone	2.00	8.15	15.85	11.25	5.42	2.93	20.00
			2.25						20.44
									22.33
238	Claimed. Found.	Swift's Pure Bone Meal and Blood	4.50	16.83	16.42	11.66	6.08	3.28	23.00
			4.65						31.47
									31.77
239	Claimed. Found.	Swift's Pure Bone Meal	3.00	11.40	18.49	13.13	6.33	3.42	24.00
			3.15						26.70
									27.95
501	Claimed. Found.	Swift's Ground Beef Bone	2.50	9.77	23.22	16.49	4.93	2.66	27.00
			2.70						28.87
									28.92
									501
TUSCARORA FERTILIZER COMPANY, Manufactured by Armour Fertilizer Works, Chicago, Ill.									
	1912.								
527	Claimed. Found.	Raw Bone Meal	4.50	17.92	17.28	12.27	7.41	4.00	22.00
			4.95						30.81
									34.19
661	Claimed. Found.	Bone Meal	2.00	11.04	24.18	17.17	4.10	2.21	27.00
			3.05						25.06
									30.42
									661
WOOD & COMPANY, CLEVELAND, OHIO. Manufactured by Armour Fertilizer Works, Chicago, Ill.									
	1912.								
88	Claimed. Found.	Pure Raw Bone Lawn Fertilizer	4.50	17.38	19.08	13.55	6.70	3.62	22.00
			4.80						30.81
									34.55
									88

* From sulphate.

TABLE II—BONES—Concluded.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			In Fine Bone.		In Med. Bone.		Total Percent.		Percent.	Value.		
			Percent.	Value.	Percent.	Value.	Percent.	Value.				
517	WUICHET FERTILIZER COMPANY, THE, DAYTON, OHIO. Superior Pure Raw Bone.	1912.	4.00	18.64							27.68	517
		Claimed. Found.	5.15		6.18	3.34	20.00	19.93			31.74	

* From sulphate.

TABLE III—FERTILIZING MATERIALS—UNMIXED.

For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, OHIO.	1912.										
58	Muriate of Potash-----	Claimed. Found.	----- -----	----- -----					49.00 51.60	----- 41.80	39.69 41.80	58
59	Nitrate of Soda-----	Claimed. Found.	18.00 18.55	53.80					----- -----	----- -----	52.20 53.80	59
157	Sulphate of Potash-----	Claimed. Found.	----- -----	----- -----					*48.00 *48.18	----- 48.66	48.48 48.66	157
552	Blood-----	Claimed. Found.	12.00 16.08	46.63					----- -----	----- -----	34.80 46.63	552
553	Kainit-----	Claimed. Found.	----- -----	----- -----					12.00 13.36	----- 10.82	9.72 10.82	553

* From sulphate.

TABLE III.—FERTILIZING MATERIALS—UNMIXED—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
166	AMERICAN COAL PRODUCTS CO., NEW YORK, N. Y.	1912.										
		Claimed. Found.	25.00 25.13	72.88							72.50 72.88	166
206	ARMOUR FERTILIZER WORKS, CHICAGO, ILL.	1912.										
		Claimed. Found.							50.00 50.08	40.50 40.56	40.50 40.56	206
419	German Kainit	Claimed. Found.							12.00 14.44	9.72 11.70	9.72 11.70	419
595	Nitrate of Soda	Claimed. Found.	19.00 19.60	56.84							55.10 56.84	595
432	CENTRAL PHOSPHATE COMPANY, MT. PLEASANT, TENN.	1912.										
		Claimed. Found.			28.00						8.68	432
					27.38						8.49	

[illegible]

* From sulphate.

[illegible]

* From sulphate.

TABLE III—FERTILIZING MATERIALS—UNMIXED—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
259	HOWELL PROVISION COMPANY, THE G. E., NEWARK, OHIO. Howell's Muriate of Potash	1912.										
		Claimed. Found.							48.00 45.12	38.88 36.55		259
323	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, OHIO. Muriate of Potash	1912.										
		Claimed. Found.							48.00 52.22	38.88 42.30		323
634	NITRATE OF SODA INTERNATIONAL AGRICULTURAL CORPORATION. Buffalo Fertilizer Works, Buffalo, N. Y., and Cincinnati, Ohio.	1912.										
		Claimed. Found.	18.00 19.40	56.26							52.20 56.26	634
128	Muriate of Potash	1912.										
		Claimed. Found.							48.00 51.42	38.88 41.65		128

596	Nitrate of Soda-----	Claimed. Found.	18.30 19.55	56.70	---	---	---	---	---	53.07 56.70	596
	JARECKI CHEMICAL CO., THE, SANDUS- KY, AND CINCINNATI, OHIO.	1912.									
656	Nitrate of Soda-----	Claimed. Found.	18.00 19.20	55.68	---	---	---	---	---	52.20 55.68	656
	MARIETTA BONE & PHOSPHATE CO., THE, MARIETTA, OHIO.	1912.									
591	Muriate of Potash-----	Claimed. Found.	---	---	---	---	---	---	50.00 49.12	40.50 39.79	591
592	Nitrate of Soda-----	Claimed. Found.	19.00 19.20	55.68	---	---	---	---	---	53.10 55.68	592
	MT. PLEASANT FERTILIZER CO., , MT. PLEASANT, TENN.	1912.									
523	Fine Ground Phosphate Rock-----	Claimed. Found.	---	---	28.00	---	---	---	28.00 30.06	8.68 9.32	523
	NITRATE AGENCIES COMPANY, NEW YORK, N. Y., AND CHICAGO, ILL.	1912.									
17	Muriate of Potash-----	Claimed. Found.	---	---	---	---	---	---	50.00 49.44	40.50 40.05	17
274	Nitrate of Soda-----	Claimed. Found.	18.00 18.45	53.51	---	---	---	---	---	52.20 53.51	274
380	Sulphate of Potash-----	Claimed. Found.	---	---	---	---	---	---	*48.00 *45.52	48.48 45.98	380

*** From sulphate.**

TABLE III.—FERTILIZING MATERIALS—UNMIXED—Continued.
For Table of Values see page 485.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Insoluble.	Total Percent.	Percent.	Value.		
581	NITRATE AGENCIES COMPANY, NEW YORK, N. Y. AND CHICAGO, ILL.—Concluded.	Claimed. Found. 1912.	---	---	---	---	---	---	12.00 13.64	---	9.72 11.05	581
585	PIEDMONT-MT. AIRY GUANO COMPANY, BALTIMORE, MD.	Claimed. Found.	---	---	---	---	---	---	50.00 50.72	---	40.50 41.08	585
586	Muriate of Potash	Claimed. Found.	18.50 19.50	---	---	---	---	---	---	---	53.65 56.55	586
613	PIONEER FERTILIZER CO., CHICAGO, ILL., AND CLEVELAND, O.	Claimed. Found.	---	---	---	---	---	---	50.00 49.56	---	40.50 40.14	613
614	Muriate of Potash	Claimed. Found.	---	---	---	---	---	---	*50.50 *49.96	---	50.50 50.46	614
	Sulphate of Potash	Claimed. Found.	---	---	---	---	---	---	---	---	---	

COMMERCIAL FERTILIZERS.

575

[illegible]

* From sulphate.

† Total Phosphoric Acid in Tankage figured at 53 cents per unit.

TABLE III—FERTILIZING MATERIALS—UNMINED—Concluded.
For Table of Values see page 485.

Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
		Percent.	Value.	Percent.	Value.	Available.	Insoluble.	Total Percent.	Value.			
TEARE & COMPANY, WILLIAM, H., CLEVELAND, OHIO.	1912.											
Hardwood Ashes	Claimed. Found.									2.50 3.16	2.03 2.56	662

* From sulphate.

DANGER! STOP! LOOK! LISTEN!

These brands show a deficiency in ingredients claimed; equivalent in total money value to four per cent. or more of Manufacturers' claims. Present law requires Manufacturer to give one hundred cents on the dollar. Therefore, these brands are quarantined and placed in the **CONTAGIOUS DISEASE COLUMN**.

All samples drawn in accordance with the law analyzed by competent Chemist.

TABLES I AND III—Continued.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
													Total Percent.
61	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CINCINNATI, OHIO. Bowker Fertilizer Works. Bowker's High Grade Fertilizer-----	1912.											
		Claimed.	3.00	-----	8.00	-----	1.50	-----	9.50	-----	27.31		
		Found.	2.85	10.32	8.56	9.07	0.90	0.24	9.46	5.24	5.29	24.92	61
242	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, OHIO. Bradley's Perfection Super-Phosphate-----	1912.											
		Claimed.	2.00	-----	8.00	-----	1.50	-----	9.50	5.00	-----	21.18	
		Found.	1.90	6.88	7.85	8.32	0.90	0.24	8.75	4.68	4.73	20.17	242

* From sulphate.

Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

DANGER! STOP! LOOK! LISTEN!—Continued.**TABLES I AND III—Continued.**

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Concluded.	1912.										
	Cleveland Dryer's.											
111	Cleveland Dryer's Ohio Seed Maker with Potash.....	Claimed. Found.	2.00 1.85	6.70	8.00 7.35	7.79	1.50 1.02	0.28	2.00 2.28	2.30	18.15 17.07	111
	Wheeler's.											
116	Wheeler's High Grade Vegetable and Tobacco.....	Claimed. Found.	1.00 1.00	3.62	8.00 7.61	8.07	1.50 0.70	---	7.00 7.03	7.10	19.58 18.79	116
	ARMOUR FERTILIZER WORKS, CHICAGO, ILL.	1912.										
332	Bone, Potash and Phosphate.....	Claimed. Found.	1.00 1.30	4.71	13.00 12.47	13.22	5.25 6.72	1.81	4.00 2.10	2.12	22.86 21.86	332
	BASH FERTILIZER & CHEMICAL CO., THE, FORT WAYNE, IND.	1912.										
444	Bashumus Tobacco Special.....	Claimed. Found.	1.50 1.40	5.07	8.00 7.16	7.59	1.00 0.32	0.09	5.00 5.22	5.27	19.23 18.02	444

469	Bashumus Big Crop Producer-----	Claimed. Found.	2.00 2.00	7.24	8.00	6.78	1.00	0.38	0.10	9.00 6.78	2.00 2.32	2.34	18.01 16.46	469
	CENTRAL MANUFACTURING CO., LOCKLAND, OHIO.	1912.												
149	Equity Pota-Bacco Special-----	Claimed. Found.	2.00 1.40	5.07	9.00 8.56	9.07	1.50 0.96		10.50 9.52	5.00 5.99			22.24 20.45	149
	DARLING & COMPANY, CHICAGO, ILL.	1912.												
508	Darling's Phosphate and Potash Brand-----	Claimed. Found.	----- -----	----- -----	10.00 7.73	8.19	13.33	----- -----	----- 11.06	2.00 1.68	----- 1.70	----- 1.70	12.62 9.89	508
	FLOWER CITY PLANT FOOD CO., ROCHESTER, N. Y.	1912.												
569	Walker's Excelsior Plant Food-----	Claimed. Found.	12.00 7.80	28.24	12.00 2.56	2.71	10.29	2.78	12.85 *13.50	11.00 *13.50	----- 17.01	----- 17.01	70.02 50.74	569
	GLOBE FERTILIZER CO. (BRANCH OF FEDERAL CHEMICAL CO., INC.), LOUISVILLE, KY.	1912.												
654	Globe Potash Special-----	Claimed. Found.	----- -----	----- -----	10.00 9.35	9.91	19.39	----- -----	12.00 18.74	2.00 1.57	----- 1.59	----- 1.59	12.62 11.50	654
	HAMM & COMPANY, THE M., WASHINGTON O. H., O.	1912.												
137	Oats and Corn-----	Claimed. Found.	----- -----	----- -----	10.00 8.89	9.42	11.00 14.22	----- -----	11.00 13.11	2.00 2.34	----- 2.36	----- 2.36	12.62 11.78	137
	HESS BROS., S. M., INC., PHILADELPHIA, PA., AND CLEVELAND, OHIO.	1912.												
92	Keystone Phosphate-----	Claimed. Found.	1.00 1.00	3.62	8.00 7.67	8.13	1.50 1.15	----- -----	9.50 8.82	2.00 2.04	----- 2.06	----- 2.06	14.53 13.81	92

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

DANGER! STOP! LOOK! LISTEN!—Continued.

TABLES I AND III—Continued.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
		1912.										
	HOWELL PROVISION COMPANY, THE G. E., NEWARK, O.	Claimed.							48.00		38.88	259
	Howell's Muriate of Potash	Found.							45.12	36.55	36.55	
	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, OHIO.	1912.										
	Number Ten—Potash Mixture	Claimed.			9.00				5.00		14.59	
		Found.			8.82	9.35	10.13		3.65	3.69	13.04	286
	Number Eight—Phosphate and Potash	Claimed.			10.00				2.00		12.62	
		Found.			8.82	9.35	10.13		2.31	2.33	11.68	287
	MARTIN COMPANY, D. B., PHILADELPHIA, PA.	1912.										
	Martin's Prize Potato	Claimed.	2.00		8.00				10.00		25.82	
		Found.	1.60	5.79	8.19	8.68	1.02	0.98	7.28	7.35	22.10	200

635	Martin's Pure Animal Bone and Potash-----	Claimed. Found.	2.00 2.05	7.42 ---	16.00 11.20	11.87 ---	5.56 ---	1.50 ---	16.76 ---	2.50 2.16	2.18 ---	20.73 22.97	635
MARIETTA BONE & PHOSPHATE CO., THE, MARIETTA, OHIO.													
299	One, Eight and Eight-----	Claimed. Found.	1.00 1.03	8.00 3.73	8.00 7.30	7.74 ---	2.00 1.85	0.50 ---	10.00 9.15	8.00 7.13	7.20 ---	20.72 19.17	299
589	Potato and Truck Special-----	Claimed. Found.	2.50 2.13	8.00 7.71	8.00 7.53	7.98 ---	2.00 2.87	0.77 ---	10.00 10.40	6.00 6.34	6.40 ---	24.13 22.86	589
MENDELSON REDUCTION CO., THE, ELYRIA, OHIO.													
397	Pure Animal Fertilizer-----	Claimed. Found.	5.75 4.65	9.53 16.83	9.53 6.33	6.71 ---	26.46 24.28	2.31 ---	15.99 10.61	---	---	34.41 25.85	397
NITRATE AGENCIES COMPANY, NEW YORK, N. Y., AND CHICAGO, ILL.													
380	Sulphate of Potash-----	Claimed. Found.	---	---	---	---	---	---	---	*48.00 *45.52	45.98 ---	48.48 45.98	380
PIONEER FERTILIZER COMPANY, CHICAGO, ILL., AND CLEVELAND, O.													
46	Pioneer 10-8 Fertilizer-----	Claimed. Found.	---	---	10.00 9.74	10.32 ---	11.00 10.93	---	11.00 10.67	8.00 7.03	7.10 ---	18.68 17.42	46
PORTSMOUTH CHEMICAL CO., THE, PORTSMOUTH, OHIO.													
610	Peerless Brand Moneysworth-----	Claimed. Found.	1.00 1.05	8.00 3.80	8.00 6.72	7.12 ---	1.00 1.08	0.29 ---	7.80 ---	2.00 2.26	2.28 ---	14.39 13.49	610

* From sulphate.

† Wholly from rock.

a. Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

† Analyses of similar brands published after completion of CONTAGIOUS DISEASE COLUMN.

DANGER! STOP! LOOK! LISTEN!—Continued.
TABLES I AND III—Concluded.
 For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
512	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, OHIO.	1912.	---	---	---	---	---	---	---	---	---	512
		Claimed. Found.	---	---	14.00 13.43	14.24	10.90	---	---	---	14.84 14.24	512
620	STADLER RENDERING & FERTILIZER CO., THE J. L. & H., CLEVELAND, O.	1912.	---	---	---	---	---	---	---	---	---	---
		Claimed. Found.	---	---	6.00 8.00	8.48	10.50 11.72	---	---	10.00 5.90	16.46 14.44	620
474	STEDMAN COMPANY, THE F. C., ATHENS, OHIO.	1912.	---	---	---	---	---	---	---	---	---	---
		Claimed. Found.	7.80 6.35	22.99	6.59 6.78	7.19	26.84 27.55	13.43 14.33	0.62 0.46	39.55 34.72	474	
475	WELCH FERTILIZER COMPANY, THE, COLUMBUS, OHIO.	1912.	---	---	---	---	---	---	---	---	---	---
		Claimed. Found.	1.00 1.10	3.98	8.00 6.60	7.00	0.70	0.19	2.00 2.28	14.12 13.47	475	

DANGER! STOP! LOOK! LISTEN!—Continued.
TABLES I AND III—Concluded.
 For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.				Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Percent.	Value.	Available.	Insoluble.	Total Percent.	Percent.	Value.	Total Value.		
512	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, OHIO.	1912.												
		Claimed. Found.	14.00 13.43	14.24	10.90				14.33			14.84 14.24	512	
620	STADLER BENDERING & FERTILIZER CO., THE J. L. & H., CLEVELAND, O.	1912.												
		Claimed. Found.	6.00 8.00	8.48	10.50 11.72				6.50 9.72	10.00 5.96		16.46 14.44	620	
474	Acme	1912.												
		Claimed. Found.	7.80 6.35	22.99	26.84 27.55	4.08	6.59 6.78	7.19	13.43 14.33	0.62 0.46		39.55 34.72	474	
475	WELCH FERTILIZER COMPANY, THE, COLUMBUS, OHIO.	1912.												
		Claimed. Found.	1.00 1.10	3.98			8.00 6.60	7.00		2.00 2.28	2.30	14.12 13.47	475	
475	Welch's Grain Grower	1912.												
		Claimed. Found.	1.00 1.10	3.98			8.00 6.60	7.00		2.00 2.28	2.30	14.12 13.47	475	

578	Welch's Standard Corn and Wheat	Claimed. Found.	2.00 1.20	4.34 7.74	8.00 8.20	0.33 1.21	8.95 3.16	2.00 3.19	17.74 16.06	578
-----	---------------------------------	--------------------	--------------	--------------	--------------	--------------	--------------	--------------	----------------	-----

†Note—The following analyses of The Independent Packers' Fertilizing Co., published at the request of the manufacturer who was not satisfied with the first analyses of these brands. These duplicate samples were collected by a regular inspector of this Department and not furnished by the manufacturer.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
	INDEPENDENT PACKERS' FERTILIZING CO., THE, COLUMBUS, OHIO.	1912.										
D+286	Number Ten—Potash Mixture-----	Claimed. Found.	----- -----	----- -----	9.00 10.93	11.59	----- -----	----- -----	5.00 4.27	----- 4.31	14.59 15.90	D 286
D+286	Number Ten—Potash Mixture-----	Claimed. Found.	----- -----	----- -----	9.00 10.68	11.32	----- -----	----- -----	5.00 5.03	5.08	14.59 16.40	D 286
D+287	Number Eight—Phosphate and Potash-----	Claimed. Found.	----- -----	----- -----	10.00 10.11	10.72	----- -----	----- -----	2.00 2.66	----- 2.69	12.62 13.41	D 287
D+287	Number Eight—Phosphate and Potash-----	Claimed. Found.	----- -----	----- -----	10.00 10.23	10.84	----- -----	----- -----	2.00 2.42	----- 2.44	12.62 13.28	D 287

a Wholly from animal matter. r Wholly from rock.

* From sulphate.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

DANGER! STOP! LOOK! LISTEN!—Concluded.

TABLE II—BONES.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	In Fine Bone.		In Med. Bone.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
567	AMERICAN FERTILIZER COMPANY, CHICAGO, ILL. "Union Brand" Pure Bone Meal and Potash.	1912.	1.00	---	---	---	---	---	---	---	19.85	567
		Claimed. Found.	0.78	2.82	9.06	6.43	4.17	2.25	3.00	3.66	15.20	
492	BARLETT, GEO. S., NEWPORT, KY. Pure Bone Flour	1912.	3.00	---	---	---	---	---	---	---	24.72	492
		Claimed. Found.	2.20	7.96	18.62	13.22	1.40	0.76	---	---	21.94	
423	CANTON FERTILIZER & CHEMICAL CO., CANTON, OHIO. Peerless Pure Raw Bone	1912.	4.00	---	---	---	---	---	---	---	29.00	423
		Claimed. Found.	4.25	15.39	9.48	6.73	9.48	5.12	---	---	27.24	

* From sulphate.

CAUTION! CAUTION! CAUTION!

Some of these brands show a slight deficiency in ingredients claimed; equivalent in total money value to less than four per cent. of manufacturers' claims. In some instances deficiency amounts to only a few cents. For that reason these brands do not belong in the **CONTAGIOUS DISEASE COLUMN**.

All samples drawn in accordance with law and analyzed by competent chemist.

TABLES I AND III.

For Table of Values see page 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.												
85	High Grade Potash Manure	1912. Claimed. Found.	--- --- ---	--- --- ---	10.00 9.79 ---	--- 10.38 ---	1.50 1.72 ---	--- ---	5.00 4.81 ---	--- 4.86 ---	15.65 15.24 ---	85
241	Ohio Onion and Truck Manure	Claimed. Found.	2.00 2.05	--- 7.42	8.00 8.44	--- 8.95	1.50 1.21	--- 0.33	10.00 8.54	--- 8.63	26.23 25.33	241
Bradley's.												
66	Bradley's Complete Manure for Potatoes and Vegetables	1912. Claimed. Found.	4.00 3.93	--- 14.23	8.00 8.66	--- 9.18	1.50 0.83	--- 0.22	7.00 6.22	--- 6.28	30.44 29.91	66
435	Bradley's Alkaline Phosphate and Potash	Claimed. Found.	--- ---	--- ---	10.00 9.96	--- 10.56	1.50 2.56	--- ---	2.00 1.79	--- 1.81	12.62 12.37	435

^a Wholly from animal matter.

^r Wholly from rock.

* From sulphate.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

CAUTION! CAUTION! CAUTION—Continued.

TABLES I AND III—Continued.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Percent.	Available.	Insoluble.	Value.	Percent.	Value.		
156	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Concluded. Farmers' Union.	1912. Claimed. Found.	---	---	---	---	---	---	---	---	---	156
			10.00	---	11.50	---	---	---	2.00	---	12.02	
			9.71	10.29	12.49	---	---	---	2.16	2.18	12.17	
158	Great Eastern's.	1912. Claimed. Found.	---	---	---	---	---	---	---	---	---	158
			10.00	---	11.50	---	---	---	5.00	---	16.05	
			9.00	10.18	12.17	---	---	---	5.30	6.10	15.53	
529	Great Eastern Wheat Special.	Claimed. Found.	2.00	---	1.50	---	0.30	---	2.00	---	18.15	529
			1.95	7.06	1.08	8.48	---	---	2.22	2.34	18.07	
			---	---	---	---	---	---	---	---	---	
215	Michigan Carbon's.	1912. Claimed. Found.	---	---	---	---	---	---	---	---	---	215
			12.00	---	11.50	---	---	---	---	---	12.72	
			11.77	12.48	12.23	---	---	---	---	---	12.44	

Northwestern's.										1912.
190	Northwestern's Horseshoe Dissolved Phosphate and Potash	Claimed. Found.	10.00 9.97	10.57 10.57	r1.50 r2.30	11.50 12.27	2.00 1.98	12.62 12.57	190	
Wheeler's.										1912.
117	Wheeler's Wheat and Clover	Claimed. Found.	10.00 9.55	10.12 10.12	r1.50 r2.02	11.50 11.57	2.00 2.01	12.62 12.15	117	
BASH FERTILIZER & CHEMICAL CO., FOET WAYNE, IND.										1912.
491	Bashumus Garden Special	Claimed. Found.	8.00 8.76	9.29 9.32	1.00 r0.32	9.00 9.08	10.00 9.70	23.19 22.71	491	
CANTON FERTILIZER & CHEMICAL CO., THE, CANTON, OHIO.										1912.
169	Peerless Dissolved Phosphate	Claimed. Found.	14.00 13.94	14.78 14.78	r2.56 r2.56	16.50 16.50	14.84 14.78	169		
CENTRAL PHOSPHATE COMPANY, MT. PLEASANT, TENN.										1912.
432	"Tennessee Phosphate"	Claimed. Found.	28.00 27.38	28.00 27.38	8.68 8.49	432				
CINCINNATI PHOSPHATE CO., THE, CINCINNATI, OHIO.										1912.
548	Bone and Phosphate Mixture Wheat Special	Claimed. Found.	16.00 17.71	1.00 1.27	22.09 21.31	548				

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

CAUTION! CAUTION! CAUTION—Continued.**TABLES I AND III—Continued.**

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
													Total Percent.
	AMERICAN AGRICULTURAL CHEMICAL CO., THE, CLEVELAND, O.—Concluded.												
	Farmers' Union.	1912.											
156	Farmers' Union Dissolved Phosphate and Potash	Claimed. Found.	---	---	10.00 9.71	---	r1.50 r2.49	---	11.50 12.20	2.00 2.16	---	12.62 12.47	156
	Great Eastern's.	1912.											
158	Great Eastern's High Grade Acid Phosphate and Potash	Claimed. Found.	---	---	10.00 9.60	---	r1.50 r2.17	---	11.50 11.77	5.00 5.30	---	15.65 15.53	158
529	Great Eastern Wheat Special	Claimed. Found.	2.00 1.95	7.06	8.00 8.00	---	1.50 1.08	---	9.50 9.08	2.00 2.22	---	18.15 18.07	529
	Michigan Carbon's.	1912.											
215	Michigan Carbon's Wolverine	Claimed. Found.	---	---	12.00 11.77	---	r1.50 r2.23	---	13.50 14.00	---	---	12.72 12.48	215

CAUTION! CAUTION! CAUTION!—Continued.

TABLES I AND III—Continued.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.	Total Percent.			
413	FARMERS' FERTILIZER COMPANY, THE, COLUMBUS, OHIO.	1912.										
		Claimed. Found.	10.00 9.66	10.24	r1.21				10.87	2.00 *2.23	13.12 13.05	413
511	Wheat Grower	Claimed. Found.	1.00 1.05	12.00 11.64	r2.02				13.66	4.00 3.87	20.38 20.05	511
44	GERMAN KALI WORKS, BALTIMORE, MD.	1912.										
		Claimed. Found.								50.00 49.20	40.50 39.85	44
612	GROVES COMPANY, THE, CINCINNATI, O.	1912.										
		Claimed. Found.								50.00 49.32	40.50 39.95	612

[illegible]

CAUTION! CAUTION CAUTION—Continued.

TABLES I AND III—Continued.

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
201	MARTIN COMPANY, D. B., PHILADELPHIA, PA.	1912. Claimed. Found.	---	---	12.00 12.18	12.91	---	---	---	5.00 4.77	---	17.77 17.73	201
591	MARIETTA BONE & PHOSPHATE CO., THE, MARIETTA, OHIO.	1912. Claimed. Found.	---	---	---	---	---	---	---	50.00 49.12	---	40.50 39.79	591
641	Muriate of Potash Buckeye	Claimed. Found.	1.50 1.20	---	8.00 8.44	8.95	---	2.00 2.94	---	3.00 2.72	---	17.48 16.83	641
17	NITRATE AGENCIES COMPANY, NEW YORK, N. Y., AND CHICAGO, ILL. Muriate of Potash	1912. Claimed. Found.	---	---	---	---	---	---	---	50.00 49.44	---	40.50 40.05	17

CAUTION! CAUTION! CAUTION—Continued.**TABLES I AND III—Continued.**

For Table of Values see pages 485 and 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash (When Included).		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
608	SMITH AGRICULTURAL CHEMICAL CO., THE, COLUMBUS, OHIO.	1912.										
		Claimed. Found.	2.00 1.65	5.97	8.00 8.38	8.88	1.50	0.41	2.00 2.35	2.37	17.74 17.63	608
618	SLOVER FERTILIZER CO., THE EDW., CAMDEN, OHIO.	1912.										
		Claimed. Found.	2.00 2.33	8.43	9.00 7.49	7.94	3.00 3.23	0.87	2.50 3.45	3.48	20.93 20.72	618
43	Swift & Company, Chicago, Ill., and CLEVELAND, OHIO.	1912.										
		Claimed. Found.	— —	—	— —	—	—	—	50.00 49.31	39.94	40.50 39.94	43
237	Muriate of Potash.	1912.										
		Claimed. Found.	4.00 3.70	13.39	6.00 7.60	8.06	1.00 0.90	0.24	7.00 8.50	9.25	31.48 30.94	237
249	Swift's Early Potato and Vegetable Grower.	1912.										
		Claimed. Found.	1.00 0.95	3.44	5.00 6.52	6.91	1.00 0.32	0.09	6.00 6.84	8.74	19.56 19.18	249

271	Swift's Special Phosphate and Potash-----	Claimed. Found.	-----	-----	10.00	-----	r1.00	-----	11.00	2.00	-----	12.62	271
			-----	-----	9.61	10.19	r0.54	-----	10.15	2.10	2.12	12.31	
343	Swift's Diamond "G" Fertilizer-----	Claimed. Found.	-----	-----	10.00	-----	r1.00	-----	11.00	8.00	-----	18.68	
	WELCH FERTILIZER COMPANY, THE, COLUMBUS, OHIO.	1912.	-----	-----	10.10	10.71	r0.96	-----	11.06	7.55	7.63	18.34	343
295	Welch's Potash Special-----	Claimed. Found.	-----	-----	10.00	-----	-----	-----	-----	2.00	-----	12.62	
			-----	-----	9.78	10.37	r0.38	-----	10.16	1.89	1.91	12.28	295
665	Welch's Soluble Phosphate-----	Claimed. Found.	-----	-----	14.00	-----	-----	-----	-----	-----	-----	14.84	
			-----	-----	13.75	14.58	r1.28	-----	15.03	-----	-----	14.58	665

a Wholly from animal matter.

r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

* From sulphate.

CAUTION! CAUTION! CAUTION!—Concluded.**TABLE II—BONES.**

For Table of Values see page 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Percent.	Value.	In Fine Bone.	In Med. Bone.	Total Percent.	Percent.			Value.
489	AMERICAN FERTILIZER COMPANY, CHICAGO, ILL. "Union Brand" Special Bone Meal-----	Claimed. Found.	2.00	6.34	14.94	10.61	5.66	3.06	20.00	-----	20.44	489	
			1.75						20.60	-----	20.01		
462	HIBSH, STEIN & COMPANY, CHICAGO, ILL. Calumet Brand Pure Bone Meal-----	Claimed. Found.	3.00	10.86	16.19	11.49	6.46	3.49	22.80	-----	25.91	462	
			3.00		-----	-----	-----	-----	22.65	-----	25.84		

* From sulphate.

THE FOLLOWING BRANDS ARE ALL RIGHT, BUT SHOW EVIDENCE OF EITHER POOR MIXING OR GREAT IRREGULARITY OF COMPOSITION OF RAW MATERIALS.
TABLE I—MIXED FERTILIZER.
For Table of Values see page 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
484	ALLIANCE FERTILIZER COMPANY, THE, ALLIANCE, OHIO. Raw Bone, Phosphate and Potash	1912. Claimed. Found.	2.00	---	6.00	---	88.00	---	3.00	---	20.95	484
			2.15	7.78	12.35	13.09	6.84	1.85	2.90	2.93	25.65	
483	ARMOUR FERTILIZER WORKS, CHICAGO, ILLINOIS. Ammoniated Bone with Potash	1912. Claimed. Found.	3.00	---	6.00	---	80.50	---	2.00	---	19.51	483
			3.60	13.03	9.47	10.04	81.72	0.93	1.54	1.56	25.56	
385	BELL FERTILIZER CO., THE GEO. A., WHEELERSBURG, OHIO. Potato and Tobacco Special	1912. Claimed. Found.	1.00	---	8.00	---	2.00	---	4.00	---	17.68	385
			3.40	12.31	11.71	12.41	4.47	1.21	*3.30	4.16	30.09	
396	DARLING & COMPANY, CHICAGO, ILL. Darling's Big Potash Brand	1912. Claimed. Found.	1.50	---	8.00	---	82.00	---	10.00	---	25.09	396
			2.78	10.06	9.41	9.97	1.46	0.39	7.78	7.86	28.28	

^a Wholly from animal matter.

^r Wholly from rock.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

* From sulphate.

ALL RIGHT, BUT SHOW EVIDENCE OF POOR MIXING—Continued.

TABLE I—MIXED FERTILIZER—Continued.

For Table of Values see page 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.	
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.			
					Percent.	Value.	Percent.	Value.					
651	FARMERS' FERTILIZER COMPANY, THE, COLUMBUS, OHIO. Potato, Tobacco, Onion and Truck Special	1912.	1.00	2.17	6.00	5.69	0.77	0.21	8.00	20.17	20.37	18.06	651
		Claimed. Found.	0.60		5.37					20.17		20.37		28.44
495	FERTILIZER COMPANY OF PARIS, ILL., PARIS, ILL. Farmers' Friend Grain Grower	1912.	4.00	13.58	10.00	18.21	6.00	1.92	16.00			26.70	495
		Claimed. Found.	3.75		17.18		7.10		24.28				
460	HIRSH, STEIN & COMPANY, CHICAGO, ILLINOIS. Calumet Brand Grain Grower	1912.	2.00	6.70	8.00	11.43	1.00	0.28	9.00	2.00		18.51	460
		Claimed. Found.	1.85		10.78		1.02		11.80	*2.91		3.67		22.08
186	INTERNATIONAL AGRICULTURAL CORPORATION. Buffalo Fertilizer Works, Buffalo, N. Y. and Cincinnati, O. General Favorite	1912.	1.50	5.61	8.00	8.41	1.00	0.41	9.00	2.50		16.71	186
		Claimed. Found.	1.55		7.93		1.53		9.46	5.80		5.86		20.29

COMMERCIAL FERTILIZERS.

597

257	Ideal Wheat and Corn-----	Claimed. Found.	2.00 1.78	9.00 10.17	1.00 1.21	10.00 11.38	5.00 4.86	22.10 22.46	257
LOUISVILLE FERTILIZER CO., LOUISVILLE, KY., AND NASHVILLE, TENN.									
408	Eagle Grain Grower-----	Claimed. Found.	1.00 1.05	7.00 8.95	0.75 0.38	9.33 10.10	4.00 2.68	15.28 16.10	408
MACE & MANSFIELD, GREENVILLE, O.									
384	Perfection Crop-Maker and Potash-----	Claimed. Found.	----- -----	11.00 13.43	2.00 2.05	13.00 15.48	2.00 0.29	13.68 14.53	384
626	Dahl's Special -----	Claimed. Found.	2.00 2.20	10.00 13.05	3.00 5.94	13.00 18.99	2.00 2.35	20.67 25.76	626
MUSKINGUM VALLEY FERTILIZER CO., THE, MARIETTA, OHIO.									
15	Peerless Brand Special Vegetable Grower-----	Claimed. Found.	1.50 1.05	9.00 12.09	1.00 0.70	10.00 12.79	6.00 6.15	21.30 23.02	15
PIEDMONT-MT. AIRY GUANO COMPANY, BALTIMORE, MD.									
584	Piedmont Champion Fertilizer-----	Claimed. Found.	1.00 0.88	8.00 10.81	1.00 0.19	11.00 11.46	7.00 5.80	19.44 20.51	584
PITTSBURGH PROVISION & PACKING CO., PITTSBURGH, PA.									
388	Special Potato Fertilizer-----	Claimed. Found.	2.00 1.80	9.00 10.94	1.00 0.44	10.00 11.38	7.00 10.08	24.39 28.42	388

* From sulphate.

r Wholly from rock.

a Wholly from animal matter.

Note — Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

ALL RIGHT, BUT SHOW EVIDENCE OF POOR MIXING—Concluded.

TABLE I—MIXED FERTILIZER—Concluded.

For Table of Values see page 486.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Brand.	Claimed and Found.	Ammonia.		Phosphoric Acid.				Potash.		Total Value.	Record Number.
			Percent.	Value.	Available.		Insoluble.		Percent.	Value.		
					Percent.	Value.	Percent.	Value.				
342	PORTSMOUTH CHEMICAL CO., THE, PORTSMOUTH, OHIO.	1912.										
		Claimed. Found.	1.00 1.50	5.43	12.00 10.21	10.82	1.00 2.71	0.73	2.00 5.45	5.50	18.63 22.48	342
520	RUEHLE & COMPANY, JOHN, DEFIANCE, OHIO.	1912.										
		Claimed. Found.	2.00 2.10	7.60	3.00 3.39	3.59	1.00 4.41	1.19	6.00 15.18	15.33	16.75 27.71	520
617	SLOVER FERTILIZER CO., THE EDW., CAMDEN, OHIO.	1912.										
		Claimed. Found.	1.00 1.10	3.98	8.00 6.84	7.25	1.00 0.83	0.22	7.00 8.67	8.76	19.44 20.21	617
	Tobacco and Truck											

STANDARD GUANO COMPANY, BALTIMORE, MD.		1912.										
471	Mammoth Potato Special.....	Claimed. Found.	2.00 2.50	9.05	8.00 9.07	0.50 1.02	0.28	8.50 10.09	10.00 8.57	8.66	25.96 27.60	471
VIRGINIA-CAROLINA CHEMICAL CO., CINCINNATI, OHIO.		1912.										
577	V. C. Diamond Potash Formula for Wheat and Corn	Claimed. Found.	0.50 0.53	1.92	9.00 11.77	1.50 1.28	0.35	13.05	5.00 3.70	3.74	16.81 18.49	577
WUICHEL FERTILIZER CO., THE, DAYTON, OHIO.												
197	Potash Special.....	Claimed. Found.	1.00 0.90	3.26	5.00 8.18	1.00 0.83	0.22	9.01	11.00 9.30	9.39	20.30 21.54	197

a Wholly from animal matter.
r Wholly from rock.

Note— Where the insoluble is from mixed animal and mineral matter no letter is prefixed.
*From sulphate.

LICENSED, BUT NOT ANALYZED.**LIST OF COMMERCIAL FERTILIZERS PROPERLY LICENSED.**

And offered for Sale in Ohio during 1912, but samples of which were not found by the Secretary or Deputies on the Markets, hence they have not been analysed, and their valuations do not appear in this report.

MANUFACTURERS' CLAIMS.

Address of Person, Firm or Corporation and Name of Fertilizer.	Ammonia.	Phosphoric Acid.			Potash (When In- cluded).
		Available.	Insoluble.	Total.	
	Percent.	Percent.	Percent.	Percent.	Percent.
American Agricultural Chemical Co., The, Cincinnati, Ohio—					
Bowker's Fertilizer Works—					
Bowker's Pure Bone and Potash Mixture.....	1.00			18.00	3.00
American Agricultural Chemical Co., The, Cleveland, Ohio—					
Tankage.....	8.00				
Crocker's—					
Complete Manure.....	1.00	8.00	1.50	9.50	2.00
Dissolved Phosphate and Potash.....		10.00	11.50	11.50	2.00
Dissolved Phosphate.....		14.00	11.50	15.50	
Great Eastern's—					
Soluble Acid Phosphate and Potash.....		10.00	11.50	11.50	5.00

Milsom's—						
Buffalo Fertilizer.....	2.00	10.00	1.50	11.50	2.00	
Pacific—						
Dissolved Phosphate and Potash.....		10.00	r1.50	11.50	2.00	
Packer's Union—						
Superior Acid Phosphate.....		14.00	r1.50	15.50		
Animal Corn Fertilizer.....	3.00	9.00	1.50	10.50	2.00	
Quinnipiac's—						
Wheat and Grass Fertilizer.....	2.00	10.00	1.50	11.50	2.00	
Special Potato.....	1.00	8.00	1.50	9.50	4.00	
Corn and Wheat Grower.....	1.00	8.00	1.50	9.50	2.00	
Dissolved Phosphate and Potash.....		10.00	r1.50	11.50	2.00	
Plain Super-Phosphate.....		12.00	r1.50	13.50		
Read's—						
Alkaline Phosphate.....		10.00	r1.50	11.50	2.00	
Williams & Clark—						
Americus Royal Phosphate.....	2.00	8.00	1.50	9.50	2.00	
American Fertilizer Company, Chicago, Ill.—						
"Union Brand" Root, Crop and Tobacco Grower.....	2.00	8.00	a1.50	9.50	*5.00	
"Union Brand" High Grade Acid Phosphate.....		14.00	r1.00	15.00		
"Union Brand" High Grade Phosphate and Potash.....		10.00	r1.00	11.00	2.00	
"Union Brand" Champion Phosphate and Potash.....		10.00	r1.00	11.00	5.00	

a Wholly from animal matter.
r Wholly from rock.

*From sulphate.

NOTE—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

LIST OF COMMERCIAL FERTILIZERS PROPERLY LICENSED—Continued.

Address of Person, Firm or Corporation and Name of Fertilizer.	Ammonia	Phosphoric Acid.			Potash (When In- cluded).
		Available.	Insoluble.	Total.	
	Percent.	Percent.	Percent.	Percent.	Percent.
American Fertilizer Company, Santa Fe, Tenn.—					
American Eagle Brand			25.00		
American Reduction Company, Pittsburgh, Pa.—					
Common Sense	1.50	7.00	1.00	8.00	1.00
Ground Garbage Tankage	2.50			2.25	
Armour Fertilizer Works, Chicago, Ill.—					
Gleaner Ohio Producer		10.00	10.50		4.00
12-5 Fertilizer		12.00	10.50		5.00
Bash Fertilizer & Chemical Company, Fort Wayne, Ind.—					
Bashumus Big Truck Grower	1.20	8.00	1.00	9.00	8.00
Blocher & Co., D., Gettysburg, Pa.—					
High Grade Super-Phosphate	1.50	9.00	1.00	10.00	2.00
Central Chemical Company, The, Hagerstown, Md.—					
Phoenix	2.00	8.00			4.00

Cincinnati Phosphate Company, The, Cincinnati, Ohio.—						
Alkaline Phosphate.....		10.00	r1.00	11.00	2.00	
Conneaut Reduction Company, Conneaut, Ohio—						
Animal Fertilizer.....	1.50	15.00				
Darling & Company, Chicago, Ill.						
Darling's Sulphate of Potash.....					*48.00	
Farmers' Fertilizer Company, The, Columbus, Ohio—						
Universal Fertilizer.....	1.00	8.00			2.00	
Steamed Bone Meal.....	1.00			29.00		
Farmers' Ground Rock Phosphate Co., Mt. Pleasant, Tenn.—						
XX Ground Phosphate Rock.....			r28.70			
Federal Chemical Company, Inc., Louisville, Ky.—						
Daybreak Vegetable and Tobacco Grower.....	1.50	8.00			6.00	
Daybreak Special Manure.....	1.00	10.00			2.00	
Daybreak Potash Fertilizer.....		9.00			5.00	
Daybreak Potash Special.....		10.00			2.00	
Daybreak Royal Phosphate.....		14.00				
Daybreak Standard Phosphate.....		12.00				
Federal Chemical Company, Inc., Columbia, Tenn. and Louisville, Ky.						
Tennessee Brown Phosphate Rock.....			r29.75			
Fertilizer Company of Paris, Ill., Paris, Ill.—						
"Paris Pure Bone Meal".....	2.50			27.00		

*From sulphate.

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NOTE—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

LIST OF COMMERCIAL FERTILIZERS PROPERLY LICENSED—Continued.

Address of Person, Firm or Corporation and Name of Fertilizer.	Ammonia. Percent.	Phosphoric Acid.			Potash (When In- cluded). Percent.
		Available.	Insoluble.	Total.	
		Percent.	Percent.	Percent.	
Fox Chemical Company (Branch of Federal Chemical Company, Inc.), Louisville, Ky.—					
Fox Potato and Tobacco Grower.....	2.00	8.00			7.50
Fox Formula.....	1.00	11.00			3.00
Fox Crop and Tobacco Grower.....	1.00	8.00			4.00
Fox Grain Grower.....	1.00	9.00			1.00
Fox Phospho-Potash.....		9.00			5.00
Fox Potash Special.....		10.00			2.00
German Kali Works, Baltimore, Md.—					
Kainit.....					12.00
Globe Fertilizer Co. (Branch Federal Chemical Co., Inc.), Louisville, Ky.					
Globe Vegetable Grower.....	1.00	8.00			8.00
Progress Corn and Wheat Grower.....	1.00	10.00			2.00
Globe Corn and Wheat Special.....	0.50	12.00			
Globe Potash Formula.....		9.00			5.00
Globe Acid Phosphate.....		14.00			
Groves Company, The, Cincinnati, Ohio— 7-11		7.00	12.00	9.00	11.00
Hamm Company, The M., Washington C. H., Ohio— Nitrate of Soda	18.00				

Howell Provision Company, The G. E., Newark, Ohio—					
Howell's Wheat and Grass Grower.....	1.00	10.00	1.00	11.00	1.00
Bone Meal.....	1.00			30.00	
Independent Packers' Fertilizing Company, The, Columbus, Ohio—					
Number One—Independent Favorite.....	1.00	11.00			3.00
International Agricultural Corporation, Buffalo Fertilizer Works, Buffalo, N. Y., and Cincinnati, Ohio—					
Ohio and Michigan Special.....	1.00	10.00	1.00	11.00	1.00
Sulphate of Potash.....					*48.00
Pure Raw Bone.....	4.00			23.00	
International Seed Company, Rochester, N. Y.—					
International Electric Fertilizer.....	1.00	8.00		8.50	2.00
Louisville Fertilizer Co., Louisville, Ky., and Nashville, Tenn.—					
Eagle High Grade Dissolved Phosphate.....		14.00	10.50		
Eagle Potash Mixture.....		10.00	10.50		2.00
Marletta Bone & Phosphate Company, The, Marletta, Ohio—					
Acid Phosphate.....		12.00	12.00	14.00	
Martin Company, D. B., Philadelphia, Pa.—					
Martin's Special Compound.....	2.00	8.00			5.00
Morris & Company, Chicago, Ill.—					
High Grade Acid Phosphate.....		14.00		14.00	

*From sulphate.

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NOTE—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

LIST OF COMMERCIAL FERTILIZERS PROPERLY LICENSED—Continued.

Address of Person, Firm or Corporation and Name of Fertilizer.	Ammonia.	Phosphoric Acid.			Potash (When In- cluded).
		Available.	Insoluble.	Total.	
	Percent.	Percent.	Percent.	Percent.	Percent.
Mutchler, Findlay H., Columbus, Ohio—					
Fertiqui (A Liquid Fertilizer)-----	1.00	1.00			
New Process Fertilizer Company, The, Columbus, Ohio—					
Muriate of Potash-----					50.00
Packers' Fertilizer Company, The, Cincinnati, Ohio—					
Acidulated Phosphate-----		14.00	1.00	15.00	
Acidulated Phosphate and Potash-----		10.00	1.00	11.00	2.00
Pure Bone Meal-----	3.00			20.00	
Pure Bone with Phosphate and Potash-----	2.00	10.00	1.00	16.00	1.00
High Potash Manure-----	1.00	6.00	1.00	7.00	8.00
Black Soil Special-----		8.00	1.00	9.00	8.00
Piedmont-Mt. Airy Guano Company, Baltimore, Md.—					
Piedmont Potato Producer-----	3.00	5.00	1.00	6.00	6.00
Pittsburgh Provision & Packing Company, Pittsburgh, Pa.—					
Pure Raw Bone Meal-----	4.50			21.00	
Bone and Meat Fertilizer-----	6.00			8.00	
Crescent Butcher's Ground Meal-----	3.00			16.00	

Wheat and Grass Fertilizer.						
Treated Bone with Potash	1.75	9.00	\$2.00	11.00	3.00	---
Phosphate and Potash	3.00	7.00	\$7.00	14.00	2.00	---
Acid Phosphate	---	9.00	\$1.00	10.00	---	---
	---	11.00	\$2.00	13.00	---	---
Queen City Fertilizer Company, Cincinnati, Ohio—						
Miami Valley Grain Grower	1.50	8.00	1.00	9.00	2.50	---
Bone with Phosphate and Potash	2.00	10.00	\$6.00	16.00	1.00	---
Lion Truck Grower	2.00	6.00	1.00	7.00	6.00	---
Acid Phosphate	---	16.00	\$1.00	17.00	---	---
Rauh & Son Fertilizer Co., E. Indianapolis, Ind.—						
Complete Fertilizer	1.00	8.00	---	---	3.00	---
Pure Bone	2.00	---	---	22.00	---	---
Half and Half	1.50	8.00	10.00	18.00	---	---
Slover Fertilizer Company, The Edward, Camden, Ohio—						
Potash Mixture	1.00	5.00	---	5.00	10.00	---
Twelve and Two	---	12.00	\$1.00	13.00	2.00	---
Smith Agricultural Chemical Co., The, Columbus, Ohio—						
Ground Bone	1.00	---	---	27.00	---	---
Abbott & Martin's Harvest King	2.00	8.00	---	---	2.00	---
Abbott and Martin's Potato and Tobacco Special	2.00	8.00	---	---	4.00	---
Hardy's Tobacco and Potato Special	2.00	8.00	---	---	4.00	---
16% Acid	---	16.00	---	---	---	---
Swift & Company, Chicago, Ill., and Cleveland, Ohio—						
Swift's Pure Bone Meal and Potash	2.25	---	---	25.00	3.00	---
Swift's Pure Dissolved Animal Bone	2.00	19.00	\$2.00	21.00	---	---
Swift's Pure Dissolved Animal Bone and Potash	1.75	16.00	\$2.00	18.00	4.00	---
Swift's Screened Hardwood Ashes	---	---	---	---	6.00	---

a Wholly from animal matter.
r Wholly from rock.

*From sulphate.

NOTE—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

LIST OF COMMERCIAL FERTILIZERS PROPERLY LICENSED—Concluded.

Address of Person, Firm or Corporation and Name of Fertilizer.	Ammonia.	Phosphoric Acid.			Potash (When In- cluded).
		Available.	Insoluble.	Total.	
	Percent.	Percent.	Percent.	Percent.	Percent.
Swift & Company, Chicago, Ill., and Cleveland, Ohio—Concluded.					
Swift's Pulverized Cattle Manure.....	3.00	-----	-----	1.50	1.50
Nitrate of Soda.....	18.50	-----	-----	-----	-----
Tennessee Chemical Company, Louisville, Ky., and Nashville, Tenn.—					
Ox Bone Meal.....	2.00	-----	-----	27.00	-----
Thomas & Son Company, I. P., Philadelphia, Pa.—					
Wheat Special.....	0.50	12.00	-----	-----	-----
Grain and Grass Grower.....	-----	10.00	11.00	-----	2.00
Tuscarora Fertilizer Company, (Manufactured by Armour Fertilizer Works), Chicago, Ill.—					
Ammoniated Phosphate.....	1.00	9.00	0.75	-----	1.00
Phosphate and Potash.....	-----	10.00	10.50	-----	2.00
Virginia-Carolina Chemical Co., Cincinnati, Ohio—					
V. C.-Bright Leaf Tobacco and Truck Grower.....	2.00	6.00	1.50	-----	6.00
V. C.-I. X. L. Acid Phosphate.....	-----	16.00	-----	-----	-----

Western Fertilizer Works, Indianapolis, Ind.—

Spring Special	1.00	8.00	r1.00	9.00	3.00
Wheat and Clover Grower	1.50	8.00	1.00	9.00	1.50

Western Union Chemical Co., Cleveland, Ohio—

Ohio Farmer Phosphate	2.00	8.00	1.50	9.50	5.00
Herrick's Fertilizer with Potash	2.00	8.00	1.50	9.50	2.00
Bull Dog Phosphate		12.00	r1.50	13.50	
Royal—Old Honest Phosphate		14.00	r1.50	15.50	

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r Wholly from rock.

*From sulphate.

NOTE—Where the insoluble is from mixed animal and mineral matter no letter is prefixed.

FINANCIAL STATEMENT OF FERTILIZER INSPECTION ENDING DECEMBER 31, 1912.

RECEIPTS.

License fees received for 785 brands.....	\$23,550 00	
Fees for special analyses.....	156 00	
Amount paid into State Treasury.....		\$23,706 00

DISBURSEMENTS.

Amount paid chemist for analyses.....	\$3,882 00	
Salary and expense of Inspector W. M. Brown.....	688 07	
Salary and expense of Inspector M. H. Jenkinson.....	542 15	
Salary and expense of Inspector Jas. A. Kennedy.....	268 57	
Expense of Inspector H. F. Fricke.....	23 87	
Expense of Clerk S. K. Johnson.....	36 63	
Supplies, etc.....	36 27	
		\$5,477 56
Balance in State Treasury to credit of Agricultural Fund		\$18,228 44

BAKED ICE CREAM.

For use in 1913.

VALUATIONS OF COMMERCIAL FERTILIZERS.

The valuations attached to the fertilizer analyses as published in the monthly bulletins issued by the State Board of Agriculture are intended to represent the average cost of the phosphoric acid, potash and ammonia they contain, delivered at Columbus in the raw materials furnishing them plus an allowance of 25 per cent. to cover the mixing of the material and the profit of the manufacturer. Sacking or bagging is not included. This item will mean an additional cost of from \$1.50 to \$1.80 a ton.

They are based on the average wholesale price for the previous year, and in each bulletin is published a statement of the ruling market price at the time as compared with the previous year's price. In the annual report the results published in the various bulletins are collected together and published as a whole.

The method of computation is given in this report on pages 82 and 83. In the bulletins for 1913 the valuations are based upon the average cost at Columbus for the year 1912 and are as follows:

	Cost of raw material per unit.	With 25% added cost in mixed goods.	Value per pound. Cents.
Ammonia.....	\$2.73	\$3.41	17.0+
Available phosphoric acid.....	0.79	0.99	5.0—
Actual potash in sulphate.....	1.05	1.31	6.5+
Actual potash in muriate.....	0.84	1.05	5.2+
Phosphoric acid in fine bone.....	0.65	0.81	4.0+
Phosphoric acid in medium bone.....	0.49	0.61	3.0+
Insoluble phosphoric acid in animal and mineral mixture.....	0.24	0.31	1.5+

TABULATED VALUATIONS OF COMMERCIAL FERTILIZERS FOR THE YEAR ENDING DECEMBER 31, 1912.

(For use in the Bulletin for 1913.)

NOTE.—“Unit” is a trade expression. “Unit” equals twenty pounds of commercial fertilizer ingredients. “Unit” means one per centum of a ton. For example, the market quotation of ammonia is \$3.41 per unit. \$3.41 divided by 20 equals 17.0+ cents per pound.

In Table No. 1, which follows, the valuation of mixed fertilizers including acid rock and potash, also bone treated with acid or mixed with rock, or in some other way altered from pure bone, are given, based on the following prices per unit and per pound for the ingredients named.

Pure untreated bone in Table 2. Treated or altered bone in Table 1.

TABLE No. 1—MIXED FERTILIZERS.

Ammonia, \$3.41 per unit, or 17.0 cents per pound.

Available phosphoric acid, \$0.99 per unit, or 5.0 cents per pound.

Insoluble phosphoric acid, wholly mineral, no value.

Insoluble phosphoric acid, in mixed animal and mineral, 31 cents per unit, or 1.5 cents per pound.

Insoluble phosphoric acid in bone, 61 cents per unit, or 3.0 cents per pound.

NOTE.—Where manufacturers only claim total phosphoric acid in treated bones, the calculation of the value from their claims is made as in case of Bones in Table No. 2.

Potash (actual) from sulphate or carbonate, \$1.31 per unit, or 6.5 cents per pound.

Potash (actual) from muriate, \$1.05 per unit or 5.2 cents per pound.

In Table No. 2 are given values of untreated bones which are computed from the following prices:

TABLE No. 2—BONES.

Ammonia, \$3.41 per unit, or 17.0 cents per pound.
 Phosphoric acid in "fine" bone, 81 cents per unit, or 4.0 cents per pound.
 Phosphoric acid in "medium" bone, 61 cents per unit, or 3.0 cents per pound.
 Total phosphoric acid in bone where "fineness" not given, 75 cents per unit, or 3.7 cents per pound.
 Potash, if found present, valued same as in Table No. 1.

In Table No. 3 are given values of the unmixed fertilizing materials, viz., potash salts, nitrate of soda, sulphate of ammonia, dried blood, tankage, raw rock, bone black, ashes, etc.

These materials are used in the manufacture of mixed fertilizers. The values given are calculated from the average price for these materials, f. o. b. Columbus, and are as follows for the fertilizing ingredients.

TABLE No. 3—FERTILIZING MATERIALS—UNMIXED.

Ammonia, \$2.73 per unit, or 13.6 cents per pound.
 Total phosphoric acid in bone (untreated) 60 cents per unit, or 3.0 cents per pound.
 Potash (actual) from sulphate, \$1.05 per unit, or 5.2 cents per pound.
 Potash (actual) from muriate, 84 cents per unit, or 4.2 cents per pound.
 Total phosphoric acid in raw rock or untreated bone black, 0.28 cents per unit, or 1.4 cents per pound.

When these substances are purchased in mixed fertilizers the cost price for the fertilizing ingredients is 25 per cent. greater, not including sacking, which will amount to about \$1.60 a ton.

AGRICULTURAL STATISTICS.

Below is given amount of fertilizers reported consumed in Ohio during 1911. This is given by sections, the State being divided into into four; Northeast, Southeast, Northwest and Southwest. These figures are based on returns furnished by Township Assessors to the various County Auditors and then reported to this Department.

NORTHWEST SECTION.

Counties.	Commercial Fertilizers.	
	Pounds used during 1911.	Estimated pounds to be used during 1912.
Allen.....	1,376,825	789,250
Auglaize.....	2,103,725	777,200
Champaign.....	3,537,735	1,426,250
Crawford.....	3,340,180	2,136,920
Darke.....	5,045,195	1,844,310
Defiance.....	1,142,551	633,425
Delaware.....	2,720,785	1,566,590
Fulton.....	2,232,225	609,975
Hancock.....	3,577,075	1,135,075
Hardin.....	2,166,425	1,694,300
Henry.....	1,194,175	672,410
Logan.....	1,698,775	728,150
Lucas.....	1,731,710	1,379,765
Marion.....	1,850,650	575,800
Mercer.....	2,125,320	660,360
Morrow.....	4,008,095	2,843,250
Ottawa.....	138,800	79,300
Paulding.....	263,000	39,810
Putnam.....	503,879	243,700
Sandusky.....	4,509,400	1,621,250
Seneca.....	7,898,720	5,227,135
Shelby.....	2,442,050	889,050
Union.....	1,810,350	815,180
Van Wert.....	143,250	140,350
Williams.....	2,317,000	326,000
Wood.....	1,630,450	748,925
Wyandot.....	2,939,700	1,561,900
Totals.....	64,448,045	31,174,830

NORTHEAST SECTION.

Counties.	Commercial Fertilizers.	
	Pounds used during 1911.	Estimated pounds to be used during 1912.
Ashland.....	3,985,650	3,312,670
Ashtabula.....	7,174,209	6,138,645
Carroll.....	2,778,965	1,870,490
Columbiana.....	4,866,255	3,921,411
Coshocton.....	3,210,565	1,922,035
Cuyahoga.....	4,409,252	4,281,259
Erie.....	2,974,800	1,969,000
Geauga.....	3,799,000	3,942,530
Harrison.....	1,050,695	487,328
Holmes.....	3,416,990	3,376,715
Huron.....	6,786,400	5,638,670
Jefferson.....	1,531,410	1,080,150
Knox.....	5,700,225	3,709,630
Lake.....	2,664,350	1,989,025
Lorain.....	5,063,900	5,138,175
Mahoning.....	4,460,102	4,010,868
Medina.....	7,850,737	6,833,699
Portage.....	7,056,996	5,263,866
Richland.....	4,226,085	3,107,300
Stark.....	7,339,680	5,409,410
Summit.....	4,851,870	3,935,467
Trumbull.....	4,491,180	4,344,118
Tuscarawas.....	2,739,529	1,333,855
Wayne.....	11,076,560	9,445,228
Totals.....	115,505,405	92,461,544

SOUTHWEST SECTION.

Counties.	Commercial Fertilizers.	
	Pounds used during 1911.	Estimated pounds to be used during 1912.
Adams.....	4,663,140	3,802,900
Brown.....	3,282,760	2,075,955
Butler.....	2,020,434	860,925
Clark.....	2,534,633	1,169,729
Clermont.....	3,048,350	2,098,895
Clinton.....	6,372,950	4,033,400
Fayette.....	5,171,100	3,155,220
Franklin.....	4,290,325	3,261,080
Greene.....	4,287,207	2,057,300
Hamilton.....	642,925	336,375
Highland.....	7,862,458	6,216,235
Madison.....	3,136,195	1,029,400
Miami.....	3,988,035	2,137,255
Montgomery.....	5,061,910	3,386,260
Pickaway.....	8,621,085	5,661,700
Pike.....	3,447,600	2,736,125
Preble.....	8,557,470	6,534,980
Ross.....	6,272,595	3,853,894
Scioto.....	2,751,040	2,998,207
Warren.....	3,127,600	1,677,950
Total.....	89,139,812	59,069,785

SOUTHEAST SECTION.

Counties.	Commercial Fertilizers.	
	Pounds used during 1911.	Estimated pounds to be used during 1912.
Athens.....	2,262,860	1,410,310
Belmont.....	2,297,005	1,453,835
Fairfield.....	7,956,545	6,810,635
Gallia.....	1,553,440	949,999
Guernsey.....	2,238,447	1,305,275
Hocking.....	2,670,670	2,080,500
Jackson.....	2,692,090	2,996,380
Lawrence.....	254,700	108,840
Licking.....	7,426,920	4,159,190
Meigs.....	2,030,075	1,344,100
Monroe.....	2,395,800	1,889,045
Morgan.....	3,142,964	1,749,175
Muskingum.....	4,312,380	3,082,620
Noble.....	1,525,470	976,390
Perry.....	5,873,510	5,056,425
Vinton.....	1,845,335	1,033,213
Washington.....	4,279,349	3,511,822
Total.....	54,757,560	39,919,736

State total, 160,925 tons for 1911.

OHIO FERTILIZER LAW.

INSPECTION OF FERTILIZERS.

SECTION 1. That sections 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1147, 1148, 1149, 1151, 1152, 1153 and 1155 of the General Code be amended so as to read as follows:

SEC. 1139. Each person, firm or corporation who manufactures, sells or offers for sale in the state a commercial fertilizer, which means any substance for fertilizing or manurial purposes, except barn yard manure, marl, lime and plaster, shall affix to each package in a conspicuous place on the outside thereof, a plainly printed certificate which shall state the number of net pounds contained therein, the name of the manufacturer, with his or its postoffice address. Such certificate shall contain also a chemical analysis which shall state the minimum percentages guaranteed of ammonia, of potash soluble in water, of phosphoric acid in available form, comprising the soluble and reverted, and of insoluble phosphoric acid, the sources of ammonia and the sources of insoluble phosphoric acid. In bone, tankage and basic slag unmixed with other material the phosphoric acid shall be claimed only as total phosphoric acid. In untreated phosphoric rock and other mineral phosphoric materials, the phosphoric acid shall be claimed only as insoluble acid. When any commercial fertilizer, sold or offered for sale in this state, contains muck, peat, pulverized leather, hair, ground horn or wool waste or other materials in which the ammonia is largely unavailable, such certificate shall state explicitly such fact.

SEC. 1140. No other form of analysis, and no duplication of terms or the equivalent thereof in other terms shall be used except that the nitrogen equivalent to the ammonia may be stated. No percentages higher than the lowest actually guaranteed shall be affixed to a package, printed upon a bag or used in printed matter descriptive of such fertilizer. No false or misleading name, brand or trade mark shall be used in designating a commercial fertilizer, or a name, brand or trade mark indicating that the essential ingredients thereof were obtained from bone or animal substance, if the source thereof was wholly or in part a mineral substance. Any material in which the organic matter has been destroyed by heat shall be deemed mineral substance.

SEC. 1141. Before selling or offering any commercial fertilizer within this state, each person, firm or corporation shall file with the state board of agriculture, a certified copy of such certificate.

SEC. 1142. No commercial fertilizer shall be sold or offered for sale if the percentage of any ingredient, element or constituent is less

than the minimum percentage claimed or guaranteed; provided that there may be a deficiency of six per cent. of the amount claimed in any one ingredient before evidence of fraudulent intent shall be presumed; if there is a corresponding excess in the other ingredients claimed on the basis of the following equivalents in value: One part of ammonia shall be deemed equivalent to three parts of available phosphoric acid; one part of ammonia shall be deemed equivalent to three parts of potash; one part of ammonia shall be deemed equivalent to six parts of insoluble phosphoric acid from animal matter; one part of ammonia shall be deemed equivalent to twelve parts of insoluble phosphoric acid from mixed animal and mineral matter; in bone or tankage one part of ammonia shall be deemed equivalent to five parts of total phosphoric acid.

SEC. 1143. Before selling or offering for sale within this state a commercial fertilizer, a person, firm or corporation shall pay each year, a license fee to the state board of agriculture for the sale of each brand thereof of thirty dollars. Upon application and payment of such fee said board shall issue a license for the current year. All licenses shall expire on the 31st day of December of each year. The payment of such license fee by a person, firm or corporation, shall exempt an agent thereof from the requirements of this section.

SEC. 1144. Each year at least one analysis shall be made of each brand of commercial fertilizer sold within this state. All such analyses shall be made under the direction of the state board of agriculture, and the expenses thereof paid by said board, from a fund arising from the payment of license fees provided for in the preceding section.

SEC. 1145. For the purposes of analysis and comparison with the certificate deposited with it and with the certificate on such package, the state board of agriculture, or a person appointed by it, shall take a quantity of not less than one pound and not exceeding two pounds, from packages of commercial fertilizer exposed or offered for sale within this state, or in the possession of a dealer, consumer or transportation company. Such sample shall be taken from at least five per cent. of the sacks or other packages comprising the whole lot sampled. If there are less than one hundred sacks in the lot sampled, sample shall be taken from not less than five sacks, if there are less than five sacks in the lot sampled, samples shall be taken from not less than three sacks.

SEC. 1147. Any person not a dealer in, or agent for a fertilizer who purchases a commercial fertilizer in this state for his own use, and not for sale, may have an analysis thereof made under the direction of the state board of agriculture.

SEC. 1148. A sample for such analysis shall be taken by the purchaser in the presence of the person, firm or agent selling the fertilizer, from at least ten per cent. of the sacks or other packages comprising the whole lot purchased. If there are less than one hundred sacks in the lot purchased, samples shall be taken from not less than ten sacks; and

if there are less than ten sacks in the lot purchased samples shall be taken from each sack, and all such samples shall be taken in the manner required by the state board of agriculture. If any person, firm or agent refuses to witness the taking thereof, the samples may be taken in the manner described in the presence of two disinterested witnesses, who shall certify to the manner of taking such samples.

SEC. 1149. The samples shall be taken at the time and place of delivery to the purchaser, from dry, undamaged goods, and from packages or sacks not theretofore opened, broken or resacked, and thoroughly mixed. At least two pounds thereof must be put into two cans or jars, marked to identify it and to show by whom sent, and shall be securely sealed and forwarded by express, all charges prepaid, to the state board of agriculture, Columbus, Ohio, together with the printed certificate from one of the bags or packages so sampled, with the name and address of the person or firm from whom the fertilizer was purchased, and the amount purchased accompanied by a fee of one dollar for each element for which analysis is asked.

SEC. 1150. The purchaser shall also send with the sample a certificate signed by himself and two disinterested witnesses, that the sender has purchased the fertilizer for his own use and not for sale, and that the sample was taken in the manner prescribed in the two preceding sections.

SEC. 1151. If a sample shall have been submitted for analysis without complying with the requirements of the preceding sections, the state board of agriculture, in its discretion, may accept such sample for analysis if it believes it is a fair sample of the fertilizer delivered to the purchaser.

SEC. 1152. The state board of agriculture and such assistants, agents, experts, and chemists, as it may duly authorize for the purpose, shall have the power to open any package or vessel containing or supposed to contain any commercial fertilizer, and take therefrom samples for analysis upon tendering the value of said samples.

SEC. 1153. Whoever sells, or offers for sale, within this state, a commercial fertilizer without complying with the provisions of this chapter relating to commercial fertilizers, or permits an analysis to be attached to any package thereof, stating that it contains a larger percentage of any constituent thereof than it does in fact contain, except as provided in section 1142, shall be fined not less than fifty dollars nor more than two hundred dollars, for a first offense, and for a subsequent offense not less than two hundred dollars nor more than five hundred dollars, or imprisonment not more than six months or both. In all prosecutions under this act, a justice of the peace, police judge or mayor, shall have final jurisdiction as in cases of violation of laws relating to

the adulteration of food and drink and dairy products. The state board of agriculture shall rest its prosecutions under this act on samples drawn, as provided in section 1145.

SEC. 1154. The attorney general, or any prosecuting attorney shall prosecute all violations of this chapter.

SEC. 1155. The state board of agriculture shall make an annual report of and may publish from time to time, analysis made on samples drawn as provided in section 1145 and the analysis guaranteed by the manufacturer. Such report shall contain a statement of moneys received and expended from license fees collected for the sale of commercial fertilizers. Any unexpended balance shall be credited to the agricultural fund. Provided, however, that no provisions of this act shall apply to any fertilizer purchased from the manufacturer by a retail dealer prior to November 1, 1911, provided that the amount of such fertilizer in the hands of such retail dealer does not exceed five tons.

SECTION 2. The said original sections 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1151, 1152, 1153 and 1155 be and the same are hereby repealed and this act shall take effect and be in force from and after the first of December, 1911.

STOP! LOOK! LISTEN!

A \$30 LICENSE FEE must be paid for each brand of commercial fertilizer sold in Ohio.

ONLY THE MINIMUM percentages guaranteed of ammonia, of potash soluble in water, of phosphoric acid available and phosphoric acid insoluble, shall be printed on packages, bags, or tags attached thereto.

THE AMENDED FERTILIZER LAW OF OHIO requires that the printed certificates or tags on sacks must state the sources of ammonia.

IF AMMONIA is claimed, such certificates should state materials from which obtained.

If fertilizer contains any muck, peat, pulverized leather, hair, ground horn, wool waste, or any other materials in which the ammonia is largely unavailable, such facts shall be explicitly stated.

IF INSOLUBLE PHOSPHORIC ACID is claimed, state source, whether from animal or mineral matter, or both.

Official Report

OF THE

Secretary of the Ohio State Board of Agriculture

ON

Feed Stuffs

Licensed to be sold during the year

1912

(621)

GREETINGS, 1912.

This Report is a store house of information. Commercial and Concentrated feeds are important factors in producing the balanced ration.

From every nook and corner of the state samples have been taken of "Feeds" sold or exposed for sale, by competent inspectors. These samples have been carefully analyzed by a noted chemist. The claims of the manufacturer are published herein. The findings of the chemist are given alongside. The purchaser of feeds may at a glance know whether or not the guarantee of the seller to the buyer is made good.

Protein, Fat and Fiber, are shown in their proportions as found in the various brands. The successful feeder no longer does things by chance. He feeds according to arithmetic and conditions. He is sure of results.

This Report will be helpful to every purchaser of commercial feeds. It is a house full of facts. Science and Experience are recorded herein by those who are well informed, and who know whereof they speak.

The manufacturers as a rule are disposed to give value received to their customers, and a square deal to the consumer. The volume of business in this line is rapidly increasing.

Prospective purchasers should consult the Reports and Official Bulletins of this Department. It will pay.

Respectfully,

A. P. SANDLES,

Secretary.

ITEMS OF INTEREST.

FEED STUFFS INSPECTION AND ANALYSIS.

The year's work as a whole relative to the licensing and inspection of feeding stuffs has been quite satisfactory.

The quality of goods sold much superior to that placed on the market years ago.

Manufacturers to a large extent are complying with the law with little or no friction, and are endeavoring to do the fair and square thing by the purchaser.

However, there is one phase of the inspection work that is annoying and that is not to be tolerated, as no valid reason exists for its continuance.

For this the manufacturers themselves are to blame, namely: The shipping of unlicensed goods into the state during the month of December, together with their reluctance to pay license fee when called upon to do so.

License fees are due and payable the first of each year; thereby giving manufacturer or shipper the entire 12 months in which to do business. If they delay taking license at that time why should they object to payment of fee in December? In some instances they undersell those who paid their \$25, trusting to luck that samples of their goods will not be located by inspector and they called upon to make good. This is an injustice to those who have license. Why then should the department not exert every effort to collect the \$25 due?

Feeders should exercise discrimination in the purchase of feed stuffs, for there is a likelihood of a heavy demand for certain feeds, thereby making it possible for the manufacturer to raise prices beyond the amount justified by its feeding value.

This inspection work is done in the interest of and to protect the feeder.

No feed stuffs should be purchased unless duly licensed by manufacturer or shipper.

Before feed stuffs can be sold application must be filed with the Department of Agriculture at Columbus, O.

This application must contain guaranteed claims for protein, fat and fiber.

These claims must be made good to the purchaser.

If the buyer wants protection only licensed goods should be purchased.

The law governing feed stuffs should be amended and strengthened and should also impose license fee on condimental foods, etc.

All licensed brands appear in Official Bulletin.

Feeders should assure themselves that tankage and other feed stuffs do not contain the germs of cholera before feeding same to their hogs.

In 1908, 171 brands were licensed.

In 1909, 303 brands were licensed.

In 1910, 372 brands were licensed.

In 1911, 472 brands were licensed.

In 1912, 466 brands were licensed.

License fee is \$25 per brand.

Publicity in Official Bulletin has greatly reduced the number of fraudulent feeds in Ohio.

Feed stuffs must be licensed each year, beginning January 1st.

Ohio State University furnishes official chemist.

FORM OF LABELING.

In order that there may be some uniformity in printing sacks for Feed Stuffs, we give below an idea how this should be done.

NET LBS.

NAME OF BRANDS.

Protein	-----	-----%
Fat	-----	-----%
Fiber	-----	-----%

INGREDIENTS

 Manufactured by

WHY HAVE WE FEED STUFFS LAWS?

Before feed stuffs laws were enacted there were many fraudulent feeds on the market. The advantage in having such a law is that it enables purchaser to buy under guarantee analysis. If such laws had not been enacted how many would now have access to tables of Digestive Experiments, Feeding Standards, Energy Value of Feeds, or a Relation of Feed to Work Performed by Animal, etc.

HOW CAN BUYERS OF FEED STUFFS PROTECT THEMSELVES?

By refusing to accept shipments unless labeled, and at the same time notifying the Department of Agriculture at Columbus, Ohio, of the facts, and the matter will be given immediate attention. By paying strict attention to the results of analysis published from time to time in the Official

Bulletins. These reports show whether or not the feed contains screenings, elevator dust, weed seeds, oat hulls, corn cob and other objectionable and cheapening "filler."

WHAT DOES A COMPANY GUARANTEE MEAN?

When a company or firm's guarantee is maintained it should not be considered as testifying to the high grade of the feed or to the superlative character of their ingredients. The statement simply means that manufacturer has kept his promise.

WHAT HAS THE LAW ACCOMPLISHED?

The practical withdrawal or lessening of low grade goods, and the up-grading of many brands. It has promoted intelligent buying, and the feeder has a better understanding of the feed nutrients and what his stock needs. The quality of the feed sold in Ohio today is far superior to that of previous years. Publicity given in the Official Bulletin is mainly responsible for this. Manufacturer is not over anxious to find his goods listed in the DANGER COLUMN.

COST OF CHEMICAL ANALYSIS FOR FEEDERS.

FEEDERS of commercial feeds, not manufacturers, dealers or agents, can send samples of feed stuffs for analysis to the Department of Agriculture for \$3.00, or \$1.00 for each element for which analysis is asked. In this way feeder can ascertain at a nominal expense whether or not goods purchased comes up to guarantee.

ANALYSES OF SAMPLES.

Correct analyses of all brands found on the markets of the state, during 1912, with claims of manufacturers, will be found in this Report. In addition to these, we print claims of the manufacturers for those brands not found on the markets by the inspectors.

Our deputy inspectors collected many samples of feed, but were unable to find samples of all brands licensed. Of 466 brands licensed, the analysis of 420 appear in this Report.

Inspectors were unable to find the 46 samples not reported, so only claims of manufacturer are printed.

Microscopic analyses made of all brands. This is done to detect adulteration, as well as to determine the ingredients used in making up a compounded feed. They are also valuable in corroborating the evidence obtained by chemical analysis.

DEALERS TAKE WARNING.

Don't allow manufacturer to load you up with goods during December, unless it is their intention to take license the year following, as all licenses expire December 31st of each year, and any goods sold after that date, unless licensed by manufacturer or shipper, makes agent or dealer liable for fee.

Many dealers handling unlicensed goods were called upon to pay license fee, as manufacturers declined to do so.

Law requires manufacturer to pay \$25 each year for the privilege of selling or offering for sale, each brand of feed stuffs, in Ohio.

Whenever manufacturer or shipper fails to pay fee, any person, company, firm or agent handling such goods is liable for fee named.

Any dealer selling feed stuffs not licensed is subject to fine.

SUBJECT TO LICENSE.

A mixed feed containing either corn bran, wheat bran, screenings, sweepings, corn cob, oat hulls and such material must be licensed.

FEE \$25—LIABILITY.

This amount cannot be prorated under the provisions of the Feed Stuffs Law. Goods found on the market at any time during the year will require license. All licenses expire with the calendar year, December 31st. Persons handling feed stuffs in Ohio should see that they are licensed to avoid liability.

OBJECT OF LICENSE.

Brands of feed stuffs must be licensed in Ohio. This is no guarantee of purity or high feeding value. This Department analyzes the goods as found on the market by inspectors. Chemist's findings are published side by side with manufacturer's claims. Purchaser must decide for himself as to the quality of the licensed goods offered for sale.

INSPECTORS.

Inspectors are prohibited from recommending any company's goods. Their duties are to collect samples of feeding stuffs as exposed for sale and forward them, sealed, to the Department of Agriculture, at Columbus.

FEED STUFFS DEFINITIONS.

Definitions of terms adopted by the Association of Feed Control Officials of the United States, November 17-18, 1911, and November 18-19, 1912.

Alfalfa meal is the entire alfalfa hay ground, and does not contain an admixture of ground alfalfa straw or other foreign materials.

Blood meal is ground dried blood.

Brewers' dried grains are the properly dried residue from cereals obtained in the manufacture of beer.

Buckwheat shorts or buckwheat middlings are that portion of the buckwheat grain immediately inside of the hull after separation from the flour.

Choice cottonseed meal must be finely ground, not necessarily bolted, perfectly sound and sweet in odor, yellow, free from excess of lint, and must contain at least 41 per cent of protein.

Chop is a ground or chop feed composed of one or more different cereals or by-products thereof. If it bears a name descriptive of the kind of cereals, it must be made exclusively of the entire grains of those cereals.

Clipped oat refuse (term oat clippings not recognized) is the resultant by-product obtained in the manufacture of clipped oats. It may contain light, chaffy material broken from the ends of the hulls, empty hulls, light, immature oats and dust. It must not contain an excessive amount of oat hulls.

Corn bran is the outer coating of the corn kernel.

Corn feed meal is the sifting obtained in the manufacture of cracked corn and table meal made from the whole grain.

Cornstarch by-product with corn bran is that portion of commercial shelled corn that remains after the separation of the larger part of the starch, and the germ by the processes employed in the manufacture of cornstarch and glucose. It may or may not contain corn solubles.

Cornstarch by-product without corn bran is that part of commercial shelled corn that remains after the separation of the larger part of the starch, the germ and the bran by the processes employed in the manufacture of cornstarch and glucose. It may or may not contain corn solubles.

Cottonseed feed is a mixture of cottonseed meal and cottonseed hulls, containing less than 36 per cent of protein.

Cottonseed meal is a product of the cottonseed only, composed principally of the kernel with such portion of the hull as is necessary in the manufacture of oil; provided that nothing shall be recognized as cottonseed meal that does not conform to the foregoing definition and that does not contain at least 36 per cent of protein.

Cracklings are the residue after partially extracting the fats and

oils from the animal tissue. If they bear a name descriptive of their kind, composition or origin, they must correspond thereto.

Digester tankage is the residue from animal tissue exclusive of hoof and horn specially prepared for feeding purposes by tanking under live steam, drying under high heat, and suitable grinding. If it contains any considerable amount of bone, it must be designated *digester meat and bone tankage*.

Distillers' dried grains are the dried residue from cereals obtained in the manufacture of alcohol and distilled liquors. The product shall bear the designation indicating the cereal predominating.

Flax plant by-product is that portion of the flax plant remaining after the separation of the seed, the baste fibre and a portion of the shives, and consists of flax shives, flax pods, broken and immature flax seeds and the corticle tissue of the stem.

Good cottonseed meal must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color and must contain at least 36 per cent of protein.

Grits are the hard, flinty portions of Indian corn without hulls and germ.

Hominy meal, hominy feed, or hominy chop is a mixture of the bran coating, the germ and a part of the starchy portion of the corn kernel obtained in the manufacture of hominy grits for human consumption.

Malt sprouts are the sprouts of the barley grain. If the sprouts are derived from any other malted cereal, the source must be designated.

Meal is the clean, sound, ground product of the entire grain, cereal or seed which it purports to represent: Provided, that the following meals, qualified by their descriptive names, are to be known as, viz.: *Corn germ meal* is a product in the manufacture of starch, glucose and other corn products and is the germ layer from which a part of the corn oil has been extracted. *Linseed meal* is the ground residue after extraction of part of the oil from ground flaxseed.

Meat scrap and meat meal are the ground residues from animal tissue exclusive of hoof and bone. If they contain any considerable amount of bone, they must be designated *meat and bone scrap*, or *meat and bone meal*. If they bear a name descriptive of their kind, composition or origin, they must correspond thereto.

Oat groats are the kernels of the oat berry with the hulls removed.

Oat hulls are the outer chaffy coverings of the oat grain.

Oat middlings are the floury portion of the oat groat obtained in the milling of rolled oats.

Oat shorts are the covering of the oat grain lying immediately inside the hull, being a fuzzy material carrying with it considerable portions of the fine floury part of the groat obtained in the milling of rolled oats.

Prime cottonseed meal must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, yellow, not brown or reddish, free from excess of lint, and must contain at least 38.6 per cent protein.

Red dog is a low grade wheat flour containing the finer particles of bran.

Rice bran is the cuticle beneath the hull.

Rice hulls are the outer chaffy coverings of the rice grain.

Rice polish is the finely powdered material obtained in polishing the kernel.

Screenings are the smaller imperfect grains, weed seeds and other foreign material having feeding value, separated in cleaning the grain.

Shipstuff or wheat mixed feed is a mixture of the products other than the flour obtained from the milling of the wheat berry.

Shorts or standard middlings are the fine particles of the outer and inner bran separated from bran and white middlings.

Wheat bran is the coarse outer coating of the wheat berry.

Wheat white middlings or white middlings are that part of the offal of wheat intermediate between shorts or standard middlings and red dog.

DESCRIPTION OF PRODUCTS.

OIL MEAL.

Linseed Meal is secured from ground flaxseed, and is the residue left after extracting the oil. This is one of our most valuable and highly prized feeds, especially for dairy purposes on account of the large amount of protein contained.

LINSEED CAKE OR MEAL.

Linseed Cake or Meal is rich in the elements of fertility, especially nitrogen. The voidings of animals receiving this food should be carefully saved, otherwise it represents a terrible loss in fertility to American farmers.

The oil of the seed is removed by one of two processes.

OLD PROCESS OIL MEAL.

The crushed seeds are heated and placed between cloths and subjected to hydraulic pressure, to extract the oil. This method is known as "Old Process" cake or oil meal.

NEW PROCESS OIL MEAL.

The seeds are crushed and heated and placed in vertical cylinders or percolates and over them naptha is poured and allowed to drain out at

the bottom of the cylinder. It dissolves the oil from the ground flax seed; no smell of naphtha is noticeable in the residue. After steaming, the meal is transferred from the percolates to driers. This by-product is known as "New Process" oil meal.

METHOD TO DETERMINE "OLD FROM NEW PROCESS" OIL MEAL.

To ascertain whether Oil Meal is New or Old Process, Woll says: "Pulverize a small quantity of meal. Put a tablespoonful into a tumbler; then add ten tablespoonfuls of boiling hot water to the meal, stir thoroughly and leave to settle. If the meal is 'New Process' it will settle in the course of an hour and leave about half of the water clear on top. 'Old Process' meal will remain jelly-like."

COTTONSEED MEAL.

Cottonseed meal is a product of the cottonseed only, composed principally of the kernel with such portion of the hull as is necessary in the manufacture of oil; provided that nothing shall be recognized as cottonseed meal that does not conform to the foregoing definition and that does not contain at least 36 per cent of protein.

Cottonseed Meal is graded as Choice Cottonseed Meal, Good Cottonseed Meal and Prime Cottonseed Meal.

COLD PRESSED COTTONSEED CAKE.

Cold Pressed Cottonseed Cake consists of the residue from Cottonseed after the extraction of oil by what is known as the cold pressure system. In preparing this material the cottonseeds are delinted and the entire seed without heating or hulling is put into a screw and the oil extracted by pressure. The residue from this process consists of the hulls, meal and such lint as was not removed, and constitutes the Cold Pressed Cottonseed Cake, which is sold as a feeding stuff without further crushing.

It is not as valuable for milk and butter production as an equal weight of Choice Cottonseed Meal and hulls mixed in the proportion of two parts of meal to one part of hulls. Report from the Texas station shows that Cold Pressed Cottonseed Cake at \$25 per ton cannot profitably take the place of Cottonseed Meal at \$30.

COTTONSEED CAKE.

Cottonseed Cake results when the envelope of the cottonseed is cut by machinery, and the oil kernels are freed from it. These oil kernels separated from the hulls are crushed, heated, placed between cloths or sacks and subjected to hydraulic pressure to remove the oil. The residue is a yellowish board-like cake about one inch thick, and in this form is

shipped abroad. In this country it is ground and transported in sacks the same as linseed meal.

BREWERS' AND DISTILLERS' FEEDS.

Malt sprouts are the dried shoots secured in the germination of barley in the production of malt.

Brewers' dried grains consist of the residue left after mashing the malt. The residue is dried and placed on the market as a feed.

Distillers' dried grains consist of the residue from the manufacture of distilled liquor and spirits from the cereals.

These feeds furnish a cheap source of protein, and are valuable for supplementing farm grown grains, especially in the feeding of dairy cows.

GLUTEN FEEDS.

The gluten feeds are of two classes: Refuse feeds from either starch or glucose factories, or from distilleries. The former are corn products only, and consist of the bran coating, gluten and germ. while the latter, dried distillers' grains, are composed of varying mixtures of cereals, corn, rye, barley, etc., from which the starch has been removed in the process of manufacture of distilled liquors.

HOMINY FEED.

Hominy Feed consists of the germ, bran and a part of the starchy protein of the corn kernel.

MIXED FEEDS OF CORN AND OATS.

Generally sold under the name of Chop Feed by mixing corn and oats together. If composed of the entire grains of corn and oats no license is required. But if there be admixtures of corn bran, wheat bran, screenings, sweepings, corn cob, oat hulls, oat clippings, and materials of similar nature, license must be procured to avoid the penalties of the law. Oat hulls and corn cob meal have little feeding value and are common adulterants of feeding stuffs.

DAIRY FEEDS.

Are usually mixtures of commercial concentrates, and placed on the market to produce a "balanced" or ready ration. They should be palatable and free from mould and rancidity.

POULTRY FEEDS.

If to any of the standard grains there be added seeds, charcoal, marble, grit, ground oyster or clam shells, or other foreign material, license is required. True character of the admixture must be stated in every instance.

ANIMAL BY-PRODUCTS.

Dried blood, tankage, ground beef or fish scraps should be comparatively free from taint, and should not have an excessive amount of bone or fat.

MOLASSES FEEDS.

Mixtures of brewers' grains, malt sprouts, oat hulls, linseed meal, cottonseed meal, grain screenings, etc., with a considerable amount of cane or beet molasses, or a mixture of both.

ALFALFA MEAL.

Alfalfa Meal consists of ground alfalfa hay. The better grades of alfalfa meal contains a larger proportion of leaves than stems. -

PROTEIN EQUIVALENT TO NITROGEN.

6.25% protein is equivalent to 1.00% nitrogen, or 1.22% ammonia.

GROUND PEAT USED AS A FILLER FOR COMMERCIAL FEEDS.

The Ohio Department of Agriculture is advised that there is being offered for sale in some of the States a ground peat which is used as a filler for commercial feeds. The Experiment Station at Wooster informs us that they have no knowledge of any possible food value in peat, and that it is possibly used to bring up the protein analysis, but that it is a kind of protein which will unquestionably be indigestible in the animal's stomach. Some peat contains from 2 to 3% of nitrogen, which would be equivalent to 12 to 18% of protein; that is, as protein is computed in feeding stuffs. There is probably no real protein in the peat.

SEEDS AND GRAINS.

Admixtures of seeds and grains classed as mixed feed and subject to license. Unless licensed by manufacturer, dealers are subject to the penalties of the law.

ADVANCE REPORTS.

No Advance Reports made of Chemist's findings on brands licensed. Those falling below claims are re-tested before publication in Bulletin.

FUNCTION OF THE NUTRIENTS.

Crude protein and crude fat are called nutrients because they build up and restore old tissues and maintain the animal's body.

PROTEIN.

Protein is the most complicated of all the nutrients of a feeding stuff. It consists of the four elements—carbon, hydrogen, oxygen and nitrogen. It has its counterpart in the various nitrogenous bodies found in the animal's system, and is the only source of these bodies. The function of protein, therefore, is chiefly to furnish the material for forming the flesh, sinews, nerves, hair, hoofs, horns, casein of milk and many other nitrogenous bodies found in the animal economy. Protein may also be utilized for the production of energy and the formation of fat in the animal's body, but since it is the most expensive of all nutrients it should never be put to the latter uses, which can be accomplished as well by the cheaper non-nitrogenous nutrients, fat and carbohydrates.

FAT.

The function of the fat in a feeding stuff is two-fold. In the first place it can be directly assimilated and thus produce animal fat, and in the second place it may serve for the production of animal heat and energy. The energy produced by the digestible fat of feeding stuff is two and one-fourth times as great as that produced by an equal weight of carbohydrates.

FIBER.

Has least value of all constituents of feeding stuffs. Its principal value seems to be as a source of roughness. A portion of the crude fiber of some feeds is digestible. However, digesting it consumes so much energy that a large portion of the value is taken up in the process of digestion. Corn cobs, oat hulls, peanut hulls, cotton seed hulls and similar material used as adulterants for feeding stuffs contain much fiber.

PERCENTAGE AMOUNT.

This is the amount in 100. If feed is guaranteed to contained 12 per cent. protein, 3 per cent. of fat and 7 per cent. of fiber, every 100 pounds of it should contain 12 pounds of protein, 3 pounds of fat and 7 pounds of fiber, and a ton should contain 20 times these amounts.

SUMMARY OF THE LAW.

The law to regulate the sale of feed stuffs in Ohio will be found on the last pages of this Report. Special attention is called to the necessity of labeling all packages, even when sales are made from original sacks or from bulk, showing number of net pounds, name of brand or trade-mark, name of manufacturer or shipper, place of business, with percentages claimed of crude protein, crude fat and crude fiber, and the

ingredients of which feed is composed. Observance of these conditions of the law will be conducive of good feeling and confidence between this Department and parties most interested.

PENALTIES.

Violation of any of the provisions of the Feeding Stuff Law is punishable on conviction by a fine. Offender also liable for damages sustained by purchaser for a deficiency of more than two per centum of crude protein or two per centum of crude fat, or an excess of two per centum of crude fiber claimed to be contained in said feed stuffs.

LICENSE LIABILITY is incurred on each brand sold after January 1st.

VIOLATION OF OHIO LAW to sell feed stuffs without license.

UNLESS MANUFACTURER OR SHIPPER pays license fee any person, firm or corporation selling or offering for sale any feed stuffs shall be held liable for license fee of \$25.

MANUFACTURER can protect agents and dealers from prosecution by licensing goods.

PENALTY OF LAW is avoided by retailer if license fee is paid by either Manufacturer, Shipper or Broker.

FEEDS SHOULD ANALYZE up to manufacturer's claims.

SECTION 1132. Under New Code. The term "feed stuffs," as used in this chapter, includes the following and similar articles of commerce: linseed meal, cotton seed meal, pea meal, cocoanut meal, rice meal, gluten meal, gluten feeds, dried brewers' grain, malt sprouts, hominy feeds, cerealine feeds, oat feeds and mixed feeds; but such term shall not include the following if sold as distinct articles of commerce, and not mixed with other substances: hay, straw, whole seeds, mixed meals, made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat, broom corn, wheat bran or middlings, and pure grains mixed and ground together. (97 v. 396 § 4.)

SECTION 1135. A person, firm or corporation which sells or offers for sale any kind of meal, ground grain, bran or middlings, adulterated with any other substance shall plainly state on each package thereof the proportions and kind of adulterants used therein. Whoever violates a provision of this section shall be fined not less than ten dollars nor more than two hundred dollars for the first offense, and not less than twenty-five dollars nor more than five hundred dollars for each subsequent offense. (97 v. 397 § 7.)

IMPORTANT QUESTIONS AND ANSWERS RELATIVE TO THE USE OF FEED STUFFS.

By H. A. WEBER, CHEMIST.

1. WHAT IS A NUTRIENT, AND WHAT ARE THE NUTRIENTS CONTAINED IN A FEEDING STUFF?

A nutrient is a single body or chemical compound, which takes an active part in the process of animal nutrition. The nutrients contained in a feeding stuff are:

1. *Nitrogenous* organic compounds, as the various albuminoids and amine bodies, known as protein.

2. *Non-nitrogenous* organic compounds, as starch, sugar, fiber, petose, gums, etc., known as carbohydrates.

3. *Non-nitrogenous* organic compounds, as the various animal and vegetable oils and fats.

4. *Inorganic* compounds or salts, as sodium chloride, potassium chloride, potassium phosphate, calcium phosphate, magnesium and iron compounds, etc., known as the ash ingredients, which form the residue after complete combustion or burning of the feeding stuff.

Single nutrient, even when fed in ample quantities, cannot support animal life. But not only this. If all the organic nutrients mentioned in groups 1, 2 and 3 are fed together and group 4 is wanting, animals will die of starvation as speedily as if receiving no food at all. The same may be said if groups 2, 3 and 4 are fed together and group 1 is omitted.

2. WHAT IS A COMPLETE FOOD?

A complete food is one which contains all of the four groups of nutrients mentioned above. The natural feeding stuffs and many of their by-products are complete foods. Among these may be cited the cereals, corn, oats, wheat, rye, barley, etc.; the legumes, beans, peas, vetches, lentils, etc.; green fodders, pasture grass, hay, corn, stover, straw, bran, linseed meal, cotton seed meal, tubers, roots and many others.

3. WHAT IS A PERFECT FOOD OR RATION?

The natural feeding stuffs, as well as the commercial by-products, taken separately, rarely if ever contain the various nutrients in the proper proportions to answer the purpose for which animals are fed. It has been shown by experiment that, for maintenance, for growth, and for the production of force, fat, flesh, milk and wool, certain proportions of the organic nutrients are the best and most economical. Special attention must be called here to the fact that the total amount of the nutrients of a feeding stuff, as determined by chemical analysis, is no criterion of its food value. The true food value of a feeding stuff depends upon the

amount of the various nutrients which are digested. In general, it may be stated that the lower the contents of fiber the higher the digestibility of the nutrients, and conversely the higher the content of fiber the lower the digestibility of the nutrients in a given feeding stuff. Hence the protein, fat and carbohydrates of such feeding stuffs as the cereals, bran, cotton seed and linseed meals and the like are much more largely digested than those of hay, straw, stover, chaff and hulls. From these considerations it is evident that in giving the proper proportions and amounts of nutrients for the various purposes for which animals are fed, only the digestible portion of the nutrients can be considered. The amounts of digestible nutrients best adapted for the various purposes of feeding farm animals, as determined by feeding experiments, are called *feeding standards*, and a mixture of feeding stuffs containing these prescribed amounts is a perfect food or ration.

4. WHAT ARE CONCENTRATED FEEDING STUFFS?

Concentrated feeding stuffs are such which usually have a low content of fiber and a high content of digestible nutrients. They are articles of commerce and are embraced in the term feeding stuffs. Some are rich in carbohydrates like the cereals; others are rich in protein like the legumes, cotton seed meal, linseed meal, malt sprouts, brewers' and distillers' grains, etc. Meat meal is rich in fat and protein. The same may be said of cotton seed meal and old process linseed meal.

5. FOR WHAT PURPOSE ARE CONCENTRATED FEEDING STUFFS EMPLOYED IN FEEDING?

The concentrated feeding stuffs are employed in feeding for the purpose of making balanced rations. By their judicious admixture to inferior feeding stuffs rations can be prepared which comply with the standards established for various purposes. Thus the feeder is enabled to utilize the inferior feeding stuffs which may be in his possession and which he could not profitably feed alone. Attention should be called here to numerous feeding stuffs found upon the markets, which contain large amounts of waste products, like oat hulls, corn cobs and rice hulls, etc. These waste products have little or no food value. The mixtures are high in fiber and low in digestible nutrients and cannot, therefore, be employed in preparing a balanced ration.

6. WHAT ARE COARSE FODDERS OR ROUGHAGE?

Coarse fodders, or roughage, consist of the bulky feeding stuffs produced upon the farm, as grass, silage, hay, straw, corn fodder and stover. Their content of fiber is high. The young plants which produce this roughage contain less woody fiber and are much more nutritious than after they have reached maturity.

7. FOR WHAT PURPOSE ARE COARSE FODDERS EMPLOYED IN FEEDING?

Farm animals, like horses, cattle and sheep, are so constituted that they can consume much more bulky food than swine. The ruminants are especially adapted to the consumption of bulky food. Owing to this fact the nutrients or coarse fodders can be utilized for the production of energy, food and raiment for the human race. The office of coarse fodders is to increase the volume of rations so as to make them suitable for the former class of farm animals just mentioned.

8. WHAT IS THE FUNCTION OF PROTEIN IN A FEEDING STUFF?

Protein is the most complicated of all the nutrients of a feeding stuff. It consists of the four elements—carbon, hydrogen, oxygen and nitrogen. It has its counterpart in the various nitrogenous bodies found in the animal system, and is the only source of these bodies. The function of protein, therefore, is chiefly to furnish the material for forming the flesh, sinews, nerves, hair, hoofs, horns, casein of milk and many other nitrogenous bodies found in the animal economy. Protein may also be utilized for the production of energy and the formation of fat in the animal body, but since it is the most expensive of all the nutrients it should never be put to the latter uses, which can be accomplished as well by the cheaper non-nitrogenous nutrients, fat and carbohydrates.

9. WHAT IS THE FUNCTION OF FAT IN A FEEDING STUFF?

The function of the fat in a feeding stuff is two-fold. In the first place it can be directly assimilated and thus produce animal fat, and in the second place it may serve for the production of animal heat and energy. The energy produced by the digestible fat of feeding stuff is two and one-fourth times as great as that produced by an equal weight of carbohydrates.

10. WHAT IS THE FUNCTION OF NITROGEN-FREE EXTRACT OR CARBOHYDRATES IN A FEEDING STUFF?

The nitrogen-free extract of a feeding stuff is the difference between one hundred and the sum of the moisture, protein, fat, fiber and ash. The digestible portions of this, together with any digested fiber, are known as carbohydrates. Like the fat, the function of the digestible carbohydrates is two-fold. They may serve for the production of fat and other non-nitrogenous bodies in the animal system as well as for the production of energy.

11. WHAT IS THE FUNCTION OF THE ASH INGREDIENTS IN NATURAL FOOD PRODUCTS?

It goes without saying that the inorganic or mineral constituents of a

feeding stuff are essential for the formation of the bones in the animal body, as these consist of about sixty per cent. of mineral matter. Especially is this true for the young and growing animal. But this is not the only function of the inorganic nutrients. Their presence is absolutely essential in all the vital processes of nutrition and assimilation. The full-grown animal, therefore, whose bones are completely developed, required a constant supply of these ingredients with its food in order to exist. Little attention is paid to these essential ingredients by the feeder of farm animals, since the natural feeding stuffs contain these nutrients in ample proportion excepting common salt.

12. WHAT FEEDING STUFFS ARE DEFICIENT IN ASH INGREDIENTS?

Of late years there appeared among the concentrated feeding stuffs a number of by-products which, from the method of their preparation, must necessarily be deficient in ash ingredients or inorganic nutrients. Among these may be mentioned brewers' grains, distillers' grains, starch refuse, and dried beet chips. All of these by-products have in the process of manufacture been exhausted with large volumes of water, and consequently the soluble salts of the ash ingredients must be largely extracted. These products should never be fed alone, and should only be the minor part of a ration in connection with other feeding stuffs of non-ash constituents.

IMPORTANT!

THE PURCHASING OF FEED STUFFS.

By ALFRED VIVIAN,

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The Ohio Code requires that with every brand of a feeding stuff sold within the State shall be furnished an analysis stating the percentages of crude protein, crude fat and crude fiber that it contains. It also places a penalty upon the sale of any brand which runs below the guaranteed percentages of crude protein and fat or above the stated percentage of crude fiber. It is often asked why these three substances are designated, and what value attaches to a knowledge of the percentage of each which is present in the feeding stuffs.

WHAT MAKES FEEDING STUFFS OF VALUE TO ANIMALS?

In the first place it is evident that a feeding stuff to be of any real value to the animal to which it is fed must be digestible. The crude

fiber is supposed to represent the more indigestible portion of the feeding stuff. Formerly it was considered to be wholly indigestible, but it is now known that a small part of the crude fiber can be utilized in the animal body. It is true, however, that the more crude fiber a feed contains the larger the waste during the process of digestion. Consequently for all practical purposes it may be assumed that the crude fiber represents the part of the feeding stuff which has no value whatever for the purchaser. To be sure, it has been shown that animals need a certain amount of crude fiber (roughage), but that can be best supplied in hay or fodder or other cheap material, and should be avoided when purchasing a concentrated feeding stuff. Recognizing this fact the law specifies that the percentage of crude fiber shall not run much above that given in the analysis.

WHAT ARE THE PRINCIPAL CONSTITUENTS OF A FEED?

The principal valuable constituents of a feed are protein, fat, carbohydrates (starch, sugar, etc.), and ash (mineral matter). The law endeavoring to make the control of feeding stuffs as simple as possible, without materially decreasing its value, has selected for guarantee by the producer the first two ingredients (i. e., protein and fat) for the following reasons:

IS THE MINERAL CONTENT OF A FEED CONSIDERED WHEN BUYING?

First, the mineral matter of the different feeding stuffs does not vary to such an extent as to make the determination of the same of any great value. While mineral matter is necessary to animal growth it is probably largely supplied by the coarser feeds such as hay, fodder and silage, and the amount of mineral matter in a concentrate would probably never be taken into consideration in purchasing the same.

NAME TWO DISTINCT PURPOSES IN ANIMAL ECONOMY.

The organic constituents of the feed serve two distinct purposes in the animal economy. They must provide material to maintain the body machinery intact, and must supply heat or energy to enable the body to do its work. Only one of the constituents of a feed can do both of these things. Protein is necessary to repair the waste which is continually taking place in the animal system, for all work which the animal does, every movement of the body, results in the destruction of muscles which must again be built up by protein. It is also necessary to furnish muscle making material for the growing animal and the casein in the milk of cows. It is, therefore, the most important ingredient of the feeding stuff,

and as it is also the most expensive it is highly desirable that the purchaser should know just how much protein he is buying in each hundred pounds of feed.

HEAT AND ENERGY SUPPLIED FROM WHAT ELEMENTS?

Fat and carbohydrates each serve the same purpose in the animal economy (i. e. to supply heat or energy), and for the most part can be used interchangeably by the animal. A pound of fat, however, supplies two and one-fourth times as much heat or energy as a pound of carbohydrate, so other things being equal one could afford to pay much more for each pound of fat than for the same quantity of starch or other carbohydrate. The extra large value thus credited to the fat makes it desirable that the feeder should be thoroughly cognizant of the fat content of all feeds purchased.

IS THE RATIONAL PURCHASE OF A FEEDING STUFF POSSIBLE WITHOUT SOME KNOWLEDGE OF ITS ANALYSIS CONTENTS?

Knowing the percentages of crude fiber, fat and protein, and realizing that the amount of ash is small in all concentrated feeding stuffs, it will be seen that the carbohydrates can be estimated closely enough for all practical purposes. The law, therefore, while it does not require a complete analysis, does demand a statement of the more important items, a knowledge of which is necessary to the rational purchase of a feeding stuff.

The question then arises as to which feed is the most economical to invest in, and so many factors enter into the matter that it is impossible to make general statements with any degree of accuracy.

WHAT FEEDING ELEMENT SHOULD BUYERS OF CONCENTRATES STUDY CLOSELY?

The farmer who buys only moderate quantities of concentrates to supplement the feeds raised upon his farm should study most of all the protein content of the feeds considered. As a rule such a farmer has at home materials which provide all the crude fiber and heat or energy forming compounds that he needs. Hay, fodder, silage, roots, corn, etc., are well supplied with fat and carbohydrates, but are comparatively low in protein. With plenty of such materials on hand, the farmer should examine the prices quoted to him with the idea of discovering which feeding stuff will give him a pound of protein at the lowest possible price. It does not follow from this that the other constituents of the feeding stuffs are valueless, but that he probably has sufficient of them at home or can grow them more cheaply than they can be purchased.

IS ANYTHING ELSE REQUIRED; IF SO, WHY?

The man who is purchasing a large proportion of the feeds for his stock (such as the dairymen of some of our large cities), has to take other things into account. His cattle must be furnished with energy as well as protein, and if he does not have a sufficient supply of feeds at home he must study the energy value of the feeds as well as the protein content. For such a man to buy intelligently, however, is a more difficult problem. He must first of all be quite sure that he is getting at the right price sufficient protein for the needs of his stock, and then must determine where he can buy the extra fat and carbohydrates needed at the lowest cost. Such a combination will probably never be found in one feeding stuff, but will require the purchase of two or more different materials, and, incidentally, necessitates more study of the subject than is generally given to it by the average purchaser of feeding stuffs.

DOES IT REQUIRE MORE INTELLIGENCE NOW TO FEED PROFITABLY THAN FORMERLY?

It requires more intelligence now to feed profitably than it did years ago, and it will require still greater intelligence as time advances. In the old days of inexpensive feeding stuffs it was very easy to make a profit. The prices of feeds for many reasons will advance, and probably more rapidly than the prices of the products produced from feeding. With such a condition of affairs the only man who can hope for large returns in the future is the one who studies to supply his animals with the requisite protein and energy at the lowest possible price. Certainly no feeds should be purchased without full knowledge as to their analyses.

SCREENINGS AND THEIR USE IN FEEDS.

BY DR. E. BROWN,

*Botanist in Charge, Seed Laboratory, Bureau of Plant Industry,
Washington, D. C.*

The term "screenings" is loosely used to cover the refuse material cleaned from cereal and forage plant seeds after the coarser chaff has been removed. The composition of different lots of screenings varies from those made up almost entirely of small, shriveled and broken grain seeds to those composed largely of dirt, chaff and weed seeds. Among the weed seeds found in screenings are seeds of practically all the weeds

which mature about the time that any of our cultivated seed crops are being harvested, so that screenings in general contain the seeds of practically all of our weed flora. In 20 samples of screenings secured from sheep-feeding stations in and about Chicago and Minneapolis, 174 kinds of weed seeds were found. These samples contained an average of 32.3 per cent. of grain seeds and 38.6 per cent. of weed seeds, or an average of 70.9 per cent. of material of possible feeding value.

Oswald (Table I, see page 14) has shown that when 20 different species of weed seeds were fed to cattle none of the kinds failed to germinate when the seeds were recovered from the feces and placed under proper conditions for germination. Dr. Beal (Table II, see page 15) found that of 22 kinds of seeds buried in the soil, 10 germinated after 25 years. Duvel (Table III, see page 16) found that 70 out of 110 kinds of seeds germinated after being buried in the soil six years. Even in Duvel's work the period of time which elapsed was longer than that occupied by any of the ordinary crop rotations. It is therefore evident that weed seeds in their natural state cannot be fed to domestic animals or in any way brought back on the land without grave danger of infesting it for years with pernicious weeds.

SOME WEED SEEDS POISONOUS.

There are a number of weed seeds which are poisonous and therefore cannot with safety be used in feeds. The more common among these are corn cockle (*agrostemma githago*) and darnel (*lolium temulentum*), each of which contains a dangerous alkaloid. The seeds of the wild mustards (4) are injurious when fed in any considerable quantity on account of the calotile oil which they contain. There is evidently far too little information as to the possible poisonous character of many of our weed seeds, and this matter should receive careful attention through feeding experiments and chemical analysis.

WHAT A CHEMICAL ANALYSIS SHOWS.

An examination of the available chemical analyses of wheat screenings and immature grain shows this material to have a higher fat and protein and a lower carbohydrate content than sound wheat. Harper (5) found that the lowest percentage of protein in rusted and frosted wheat was greater than the average for graded wheats, or, in other words, that the effect of both rust and frost is to reduce the formation of carbohydrates without proportionately reducing the formation of oil and protein.

Winton (6), in discussing analyses of wheat screenings and weed seeds, says: "Each of the samples of screenings contained considerably

more protein, fat, ash and fiber, but less nitrogen-free extract than the average of American wheat. Of the constituents of the screenings, the broken and shrunken wheat was richest in protein, owing to the presence of immature kernels, whereas black bindweed seed was poorest in protein. Green foxtail seed with nearly 15 per cent of fiber contained considerably more protein than sound wheat and yellow foxtail with over 23 per cent of fiber nearly as much. Seeds of both species of foxtail are about three times as rich in fat as wheat. Black bindweed and buckwheat are not only closely related botanically, but their seeds have practically the same chemical composition."

Chenopodium album (4), goosefoot or lamb's-quarters, which is sometimes used for making bread in Russia, has practically the same chemical analysis as alfalfa hay, and is closely related to the cultivated *chenopodium quinoa* (4), which furnishes the chief grain crop of the high Andes. Thus we see that the weed seeds commonest in screenings, lamb's-quarters, the foxtails and bindweed, all have good feeding value.

TABLE I.
BOTANICAL ANALYSIS OF SCREENINGS.

	Grain Screenings.									
	1	2	3	4	5	6	7	8	9	10
Percent Pure Seed.....	33.8	53.3	52.7	29.6	39.2	69.4	19.8	24.9	21.	31.
Percent Foreign Seed.....	28.1	26.	15.5	32.6	42.1	22.	24.	18.1	45.	33.1
No. Weed Seeds per lb.....	70,785	95,280	73,650	162,360	187,785	41,715	90,630	99,960	389,236	105,012
No. Kinds of Weed Seeds.....	48	58	68	56	44	29	52	40	51	49
Percent Lambs-quarters and Foxtail.....	4.9	8.9	1.9	13.1	19.3	2.8	7.5	9.	37.8	7.9
	Grass and Clover Screenings.									
	11	12	13	14	15	16	17	18	19	20
Percent Pure Seed.....	30.3	25.2	33.7	12.5	29.3	35.3	27.9	51.9	12.3	12.1
Percent Foreign Seed.....	16.7	32.5	53.1	80.	41.6	31.2	32.2	27.	84.4	85.4
No. Weed Seeds per lb.....	21,924	121,860	568,080	321,255	231,064	174,408	154,980	212,547	1,180,375	428,614
No. Kinds of Weed Seeds.....	37	43	32	30	29	43	70	21	16	17
Percent Lambs-quarters and Foxtail.....	0.6	9.4	50.	2.3	21.9	2.5	12.7	1.	0.2	0.03

TABLE II.
CHEMICAL ANALYSES OF WHEAT SCREENINGS.

Station No.	Spring Wheat Screenings.			Winter Wheat Screenings.		Wheat Screenings Bought in Connecticut. Further particulars unknown.										Broken and shrunken wheat from No. 5164.	Black birdseed seeds from No. 5164.	Green foxtail seed from No. 5164.	Yellow foxtail seed from No. 5164.	Average of 310 analyses of American wheat.
	From New York City.	From Milwaukee.	Average of five largest mills in Minneapolis.	From mill in Detroit.	From mill in Alton, Ill.*															
7887	10.14	11.70	10.06	10.95	11.34	7888	7890	7886	7888	5109	5110	5111	5112	5158	5164	7401	7405	7403	7404	
Water	10.14	11.70	10.06	10.95	11.34					12.14	12.11	12.07	12.27	12.35	11.65	12.25	12.23	11.76	10.49	10.5
Ash	3.17	3.04	5.69	2.84	4.09	3.59				3.50	3.70	3.50	3.55	3.24	3.50	2.62	2.02	5.50	8.23	1.8
Protein	13.87	15.06	14.00	14.69	13.31	14.75				13.87	13.87	14.44	14.25	14.50	15.25	17.12	9.12	14.50	11.50	11.9
Nitrogen-free Extract	59.01	60.32	50.90	62.36	60.85	6.64				8.69	8.69	8.64	8.06	4.80	6.85	3.02	8.46	11.24	23.02	1.8
Fiber	8.83	6.31	13.21	5.09	7.61	58.06				57.09	57.09	56.44	56.58	61.33	57.64	62.34	65.96	51.44	40.73	71.9
Fat	4.98	3.57	6.14	4.07	2.80	4.82				4.54	4.54	4.91	5.29	3.78	5.11	2.65	2.21	5.56	6.03	2.1
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

* Note:—This sample represents only the coarser materials separated from the grain and does not include the dust, smaller seeds, etc.
American Wheat screenings, by A. L. Winton, page 344, Report of Connecticut Agricultural Experiment Station, 1902.

TABLE III.
CHEMICAL ANALYSES OF SCREENINGS AND FEEDING STUFFS.

	Lamb's Quarters.	Alfalfa Hay.	Quinoa.	Wheat Bran.	Wheat.	Rusted and Frosted Wheat.	Wheat Screen-Ing.	Wheat Screen-Ing.	Clover Screen-Ing.
	4	7	4	7	8	8	8	4	4...
Protein	15.3	14.3	17.1	15.4	11.87	15.34	12.5	12.9	31.2
Fat	6.5	2.2	4.6	4.	2.09	2.68	3.	2.4	5.9
Nitrogen-free Extract	40.7	42.7	54.7	53.9	71.9	67.51	65.1	63.7	33.9
Fiber	20.3	25.	4.7	9.	1.79	2.85	4.9	7.4	12.5
Water	12.2	8.4	15.5	11.9	10.52	9.78	11.62	10.2	10.2

Compilation from Pott (4), Turner and Spears (7), Jenkins and Winton (8).

TWO AGRICULTURAL PROBLEMS.

There are two agricultural problems connected with screenings: The first and more general one is the improvement of agricultural methods looking toward a lessened production of screening material; the other and more immediate problem is the utilization of such material as is produced without danger of seeding agricultural land with dangerous weeds. While it is necessary that every precaution be taken to prevent the return of weed seeds to the soil, we should at the same time consider both the feeding value of the grain contained in screenings and the feeding value of the weed seeds themselves.

APPROXIMATE VALUE OF SCREENINGS.

In order to get at an approximation of the value of screenings in the United States, it is safe to estimate an average dockage of 2 per cent on all the wheat produced. This percentage estimate is based on the analysis of over 700 carloads, or larger lots, of wheat, with an average of over 2 per cent of weed seeds and chaff, not including shriveled and broken grain. Taking the average wheat crop of the United States as 700,000,000 bus. and estimating the average dockage at 2 per cent, we have 14,000,000 bus. of dockage, which has an approximate market value of $33\frac{1}{2}$ c per bu., or \$4,666,000 as a conservative estimate of the annual value of screenings from wheat alone. This is exclusive of the screenings from oats, barley, flax, grass and clover seed. The value of this material is far too great to dismiss it without a careful consideration of its proper utilization. Such utilization can be made without in any way endangering the reseeded of agricultural land with weed seeds by first destroying the vitality of the seeds. It is only necessary to separate this screening material into large and small seeds so that by grinding separately all the seeds will be crushed and germination prevented. In this way all possibility of contamination is removed and the full feeding value of this material can be realized. Such ground material should be sold guaranteed as to chemical analysis, freedom from poisonous seeds and as to the principal kinds of seeds contained in the mixture.

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* * *

In other words, it appears to me there is just one thesis in this phase. We have a large by-product in agriculture. If this by-product is of feeding value sufficient to cover the cost of transportation from the place where it appears to the place where it should be used, we ought not to throw it away, because it needs and must have certain treatment before it can be utilized.

COTTONSEED MEALS AND THEIR MANUFACTURE.

BY DR. R. E. STALLINGS, *State Chemist of Georgia.*

The cotton seed is purchased by the oil mills from the ginneries. As a rule, there are different varieties of the seed; some containing more lint than others, and containing, of course, sticks, sand, and rocks. In purchasing the seed an effort is made by the millers to separate the seeds that have been previously heated or fermented from the sound seed. This foreign matter is gotten rid of by machinery and the seeds then pass through what is known as linter machines. At first they get off what is known as "A" linters and the next is called "B" linters, and finally the very fine lint called "hull fiber." Even this process does not get off all the lint from the seed which, as you will understand later, is of benefit in separating the hulls from the meats. This lint is used in the manufacture of mattresses, etc., and some of it is used in the manufacture of gun cotton.

SEPARATE MEAT AND HULLS.

After this, the seeds pass from the linter machines to the "huller" knives and there the separation of the hulls and inner meats takes place by means of sieves. The little lint that is left on the hulls holds it together and keeps it from going through the holes which receive the

meats. In certain kinds of cotton seed, such as the variety known as the petriken, the seed has no lint on it and, therefore, it is almost impossible to make a separation of hulls. In the sea island cotton seed, which contains no fiber after it is ginned, it is also impossible to make a separation in this case and they usually grind up the seed and press the oil from this and leave the hulls and meats together. This is called sea island cotton seed meal which contains about 3.7 per cent nitrogen, or about 23 per cent protein.

After the seeds are crushed by the "huller knives," the meats pass through a series of rolls into heaters and are then cooked. The meats go into a "former" and these meats are put in a press and under high pressure the oil is extracted, which makes it into a cake and this is known as "cotton seed cake" and is sold as such on the market. The crude oil that comes from the cakes is sent to the refineries and the free fatty acid is taken from it and leaves a bright yellow oil known as "prime summer oil." This oil is bleached colorless and the odor taken from it. The refined oil is also used largely to take the place of and as a substitute for olive oil. The residue left from the refining of this oil is used in making soap. There is also a product, a gummy material, that is used in paints.

WHY HULLS ARE PRESENT.

Now as to the amount of hulls present in a meal, it is absolutely necessary that the sieves be so arranged that a certain percentage of the hulls go with the meats so that a maximum amount of the oil may be extracted, as you will most readily see that the oil is the most valuable product from the cotton seed. If there were no hulls present, there would be a mass from which it would be impossible to extract the oil with profit. The amount of meal taken from a ton of cotton seed varies considerably with the kind of seed, the season, and the locality in which it is grown, but there is an average of about 850 pounds of meal. The amount of meal that is obtained from a ton of cottonseed has nothing to do with its protein content—that is, in the ordinary method of manufacture. I will say that there is no fixed relationship between these two figures. For example, I have before me the figures of a manufacturer, taken at random, showing 714 pounds of meal from a ton of seed containing 7.5 per cent ammonia and another showing 901 pounds of meal from a ton containing 7.64 per cent ammonia. This shows that the per cent ammonia present is practically the same, and there was considerably more pounds of meal made in the latter case than in the former.

ASKS FOR "SQUARE DEAL."

I believe that in fixing standards as to what should be cotton seed meal and what should not be called cotton seed meal, we should take into

consideration what meal a manufacturer can make and the analysis of the same, in the ordinary course of manufacture. You will note that this product is one of the richest in protein of any on the market, and it should not be discriminated against, but given a square deal. I believe that no product that has food value should be outlawed or discriminated against and should be sold for exactly what it is, whether it be oat hulls, cotton seed hulls, oats, corn or cotton seed meal.

As to what is the cause of the different colors of meals; some being *dark*, some *light*, and some *brown*, I do not know. I do not approve of the use of any products as a feed in which fermentation or molds have formed. It has been stated that the cause of dark meal is that fermentation has taken place, but I know that the color is not always an indication that the meal is spoiled, because it is said that dark meal may be derived from what is known as "continuous cooking process." I have received a preliminary statement from an investigator in one of our colleges who has been feeding dark meal under very close observation and considerable degree of skill, and as yet no ill effects have been observed. I am of the opinion that this product should actually be sold on its *protein* content, if it is possible to educate the purchaser along this line. A good many states have standards for feeds as to the minimum content of protein and many manufacturers have only changed their formulas to meet this standard by adding some cotton seed meal.

Now it appears to me that in arriving at a standard which is just and right both to the manufacturer and consumer, we place the standard so that manufacturers can comply with the law and be able to sell as meal that product that comes from the oil mill in the ordinary course of manufacture.

FEED FOR FATTENING STEERS.

BY PROF. C. S. PLUMB,

Department of Animal Husbandry, Ohio State University, Columbus, O.

Feeders of beef cattle in Ohio must study the cost of production with much care. High priced feed and high priced land make it difficult to feed steers with profit.

DESIRABLE COMBINATION.

Under our ordinary Ohio farm conditions, clover hay, corn stover, corn on the ear, shelled or as corn meal, with oil meal or cotton seed meal in a small way, will give good results. The use of ten to fifteen per cent oil meal or cotton seed meal, with 85 to 90 per cent of corn will make a very desirable combination. At present prices, cotton seed meal

is one of the very cheapest concentrated foods the steer feeder can buy. If one has good clover hay, this with corn alone, will do very well. In steer feeding experiments at the Indiana experiment station, a combination of about 8½ pounds clover hay and 19½ pounds corn gave an average daily gain of two pounds for 1,000 pound steers.

Steers fed clover six months did distinctly better than those fed timothy in place of clover.

VALUE OF SILAGE.

In the economical feeding of cattle, no food surpasses silage in value. Many silos are being constructed in Ohio in these recent years, but mainly for use with dairy cattle. Yet enough feeding has been conducted with steers, where silage formed a part of the ration, to demonstrate that this is a most valuable food. The experiment stations of Ohio, Illinois and Indiana have conclusively shown that steers fed silage made good use of it. Mr. Carmichael, at the Ohio station, fed one lot of steers a combination of 24.3 pounds silage, 5 pounds mixed hay, 0.8 pounds corn stover, 14.9 pounds shelled corn, and 1.7 pounds cotton seed meal, and another lot 11.2 pounds mixed hay, 1.7 pounds corn stover, 17.8 pounds shelled corn and 1.7 pounds cotton seed meal. The steers had an average weight of 955 pounds each and were fed 140 days. The silage fed lot required 714 pounds of grain, 1,043 pounds silage and 215 pounds of hay for 100 pounds gain in live weight, while the other lot required 845 pounds grain and 845 pounds mixed hay for 100 pounds gain. Cattle fed silage ship equally well with those not so fed.

Our Ohio farmers engaged in steer feeding will do well to establish silos on their farms, if they have not already done so, if they wish to make use of one of the cheapest and most palatable food stuffs for cattle.

CEREAL MILLING OFFALS.

By S. K. JOHNSON,

Ohio Department of Agriculture.

In order to elicit expression from feed manufacturers and those having in charge the inspection of feeding stuffs in the various states, The Ohio Department of Agriculture sent out several hundred letters to feed control officials and feed manufacturers asking what materials they considered cereal milling by-products and cereal milling offals, and whether the nutritive value of "offals" was commensurate with the price asked, with the result that the replies were most interesting, but showed a lack of uniformity of opinion as to what are considered the cereal

milling "by-products" and "offal" products. For instance, wheat bran is classed as a milling "by-product" in one section and as a milling "offal" in another section.

As there is no legal or trade distinction between the terms "by-products" and "offals," shall this convention go on record as attempting to formulate a clear and satisfactory definition of the terms as used today, thus terminating sectional interpretation affecting the true meaning of the terms "by-products" and "offal"?

DEFINITIONS.

Based upon my investigations, and in accordance with the foregoing remarks, I have reached the conclusion that a generally recognized definition of these terms is desirable, and would suggest for your consideration those definitions which have occurred to me as probably meeting all requirements.

Cereal Milling By-Products are feeding stuffs made from the one time cereal "offals" incidental to the manufacture of human food, and which have a recognized market and food value independent of the principal product manufactured.

Cereal Milling Offals are waste materials of little or no market and food value as a raw material, such as rice hulls, oat hulls, corn cob and similar refuse, and from which no product of value is derived, and which are often used to adulterate and debase for fraudulent purposes "by-products" with a recognized commercial and food value.

CEREALS.

The six most important cereals of the world are wheat, rye, barley, maize, oats and rice. Rye is the leading cereal of northern Europe, and barley of southern Europe, while rice is the leading cereal of Asia. In this country the three just mentioned occupy a minimum place, while maize, wheat and oats occupy by far the largest part of the cultivated area.

Cereal is a grass grown for its edible grain, and is applied to the plant as a whole and to the grain itself. This definition would exclude buckwheat as a cereal, though it is generally so classed, because the seed is used in the same manner as the true cereals.

CEREAL MILLING.

Cereal milling, once a rural industry, has undergone a complete revolution in the course of the last thirty years. Refuse materials once considered valueless have with the aid of science and the necessity of the times become useful. The profits of manufacturers are now often made

entirely from the refuse formerly thrown away, and which are now clearly "by-products."

What is today known as the "by-products" of starch and glucose factories, flouring mills, breweries and distilleries, were only a short time ago classed as milling offals. Possibly due, no doubt, to the fact that manufacturers found it difficult and expensive to dispose of them; there being no commercial demand at the time. Today they have a value all their own, and are an important factor in the earnings of the various industries. "Offals" through some scientific discovery may acquire a fixed commercial value, which must necessarily take it from the "offal" class and place it in the "by-product" class. In the same manner, by the discovery of some cheaper or more useful method, a "by-product" may be relegated to the "offal" class. Thus any definition of these terms which may be agreed upon must ever be subject to change with the advance of scientific discovery.

BY-PRODUCTS.

The cereal milling "by-products" are understood to include feeding stuffs made from the cereals incidentals to the manufacture of human food, or chief product.

The term "by-product" is defined as a secondary or additional product, something produced, as in the course of a process of manufacture, in addition to the principal product or material, and of value independent thereof.

Where milling "by-products" and milling "offals" begin, is a question for you to determine. It is here that my suggestion as to those definitions is a matter for consideration. The "by-products" of wheat we know as bran, shorts, middlings, shipstuff and red dog flour; of corn-gluten meal, gluten feed, corn feed meal, hominy feed, corn germ meal and corn distillers dried grains. of rye, rye bran and rye middlings; of barley, brewers' grains, malt sprouts and barley feed; of oats, oat middlings, oat groats and oat feed; of rice, rice bran, rice polish and rice meal. These "by-products" make nutritious and excellent feed.

Some mills question the use of the term "by-product" as the name for mill feeds, because they have become a most essential factor in milling, and are far from being of secondary consideration. A one-time "by-product" through increased demand may become the principal production of a factory, thus relegating to the position of "by-product" that which was originally the principal product.

If the millers themselves question and disagree as to the use of the term "by-product," which means a secondary or additional product, is it not just as essential that this convention take action also on the term "offal," which means waste? The two terms have for a long time been confused and used synonymously, when such should not be the case.

Much material classed as "offal" is today mixed with the "by-products" and sold under the latter designation. Chaff, hulls, stems formerly discarded or used as fuel are now ground and mixed with the "by-products." Such materials should be sold as forage, not as mill feed, having less value than hay when fresh, sweet and free of mold, and properly cured.

TERM NOT COMMONLY USED.

The term "oral" was originally given to refuse matter as a result of milling. "Offal" meant waste, something thrown away as worthless, of little value or use. The term is not commonly used today either by stock feeders or live stock investigators. It refers to the coarser and cheaper feeds, which are little used for stock feeding; for instance, corn bran, rice hulls, oat hulls, corn cob and similar refuse.

Years ago in the light of little experience in stock feeding, and the slight information had on the value of cereal milling refuse, the term "offal" was unquestionably applicable, as little was known of its scientific value.

Within the memory of many persons now living, the bran sprouts of grist mills often emptied their contents into the river. Flour mills either burned their bran or blew it out to the four winds. It was a valueless "offal." Since then stock feeders have learned its true feeding value, and today it is one of our most valued "by-products."

Materials like corn bran, rice hulls, oat hulls, oat clippings, corn cob, straw, chaff, elevator dust, sweepings, grain screenings and the like should be classed as "offal." Most of them have a fuel value in excess of a feed value.

As before stated, the term "offal" has not the same meaning in all sections of the country. In the southwestern states it is only heard of in text books and bulletins from experiment stations in the northern states. It was a seaport term at shipping stations. Immediately following the civil war the term became obsolete as a common term in the feed trade in that section. Perhaps there was less need for the term "offal"; there being no manufacturing plants of breakfast foods, oat meals or kindred manufacturing plants in that section.

However, the term "adulterant" is in common use. Wheat "by-products" containing over 3 per cent of wheat screenings composed of faulty wheat, weed seeds, dust and scourings; corn "by-products" with over 3 per cent of corn bran are considered adulterated feeds. The refuse materials we speak of as "offals," are in that section known as "adulterants."

FEDERAL COURT DECISION.

In this connection a letter received from the Kornfalfa Feed Milling Co., of Kansas City, Mo., states: "The federal government and the

different states that have tried to prosecute what they considered adulteration have, in many instances, not proven successful. The reason for this is due to the fact that adulteration is defined as deleterious and harmful. The recent decision at Montgomery, Ala., in the federal court, confirms this and also brings to the attention of the officials that it is necessary to be more scientific in connection with the term misbranding.

"The writer for years has advocated that adulteration should be termed exactly as Webster defines it; viz., debasement for fraudulent purposes.

If adulteration was defined this way, and a manufacturer guaranteed to you, in the state of Ohio, that his feed contained 5 per cent of oat hull content, suppose you were to find 10 per cent, you would be able to prosecute him and be successful for the interest of the consumers in the state of Ohio. But you cannot do this successfully, as legal precedence shows, under the term of deleterious and harmful, and according to the decision at Montgomery. If the man had 10 per cent of oat hulls in the feed, when guaranteeing 5 per cent, the product would not be misbranded."

In view of the foregoing letter the thought occurs to me that while criminal prosecution may be impossible, it is highly probable that a civil action could be sustained.

NUTRITIVE VALUE.

The nutritive value of "offals" when used as an adulterant is seldom commensurate with the price asked, as the "offals" carries with it a packing and milling charge, a sacking space, a selling and an advertising cost. This final cost plus freight is invariably excessive, and is doubtless paid by our old friend, the "ultimate consumer."

• Corn cobs when ground with the corn have a nutritive value, but when fed by themselves do not possess any nutritive properties worth mentioning. The tendency is for the manufacturer to mix them in his feeds to a considerable degree, and sell the mixed product at the price of the ostensible product. The price not being reduced by the use of an adulterant.

Some buyers when purchasing feeding stuffs consider the co-efficient of digestibility as the best evidence of the value of the product. The feeder of the future will undoubtedly use the "offals" in their proper place. If the farmer will utilize the low grade materials on his farm and not go away from home to purchase them mixed in feeding stuffs, at fancy prices, the present high cost of living will not be increased.

FOR DEFINITE UNDERSTANDING.

Definite understanding and agreement as to the terms of general use would materially simplify compliance with the law on the part of

large dealers who sell in a number of different states, and would make less difficult the work of those charged with its administration and supervision.

Many of you at much expense and loss of time have traveled some distance to attend this convention. I know you do not want to return home without something definite accomplished as to the subject I have in my limited way endeavored to discuss. For that reason, if for no other, this convention could well afford to adopt a definition covering the terms "by-product" and "offal," and put at rest for all time any uncertainty as to the correct interpretation and proper application of these terms.

ECONOMICAL FEED RATIONS FOR DAIRY COWS.

BY PROF. OSCAR ERF,

Department of Dairying, Ohio State University, Columbus, O.

Since the price of feed is high the question of feeding cows economically becomes a very important one. Naturally the first thing to be taken into consideration is the adaptability of the animal itself. Years ago when feed was cheap, this question was of less importance.

IN CHOOSING FEEDS.

Next in importance to the individuality of the animal comes the feed problem. In choosing feeds several things must be taken into consideration; first the composition of the feed; second, the digestibility; third, the palatability; fourth, the succulency; fifth, the proportion of nitrogenous to non-nitrogenous nutrients; sixth, proportion of roughage to concentrates; and seventh, the fertilizing constituents.

KNOWN COMPOSITION OF FEEDS.

It is necessary to know something about the composition of feeds in order to enable the feeder to determine the relative values of the feeds at his disposal, or on the market, and to assist him in determining what quantity of feed is necessary to supply the required amount of nutrients. The Ohio State Department of Agriculture is doing much by giving the composition of the various feeds to the farmer. The value of some of the feeds can easily be determined by one glance over their reports.

NUTRIENTS.

The nutrients found in feed stuffs that need the most consideration are protein, carbohydrates and fats. Protein is the most valuable of the

nutrients, since it contains all the elements found in the carbohydrates and fats, the element of nitrogen. Therefore it is placed in a group by itself more than either of the other constituents.

PROTEIN.

Protein in feed makes the protein in milk; therefore, in order to secure the greatest efficiency from the cow, it is necessary to feed at least ten per cent more protein than the amount found in the milk that the cow produces. Protein is found in considerable quantities in all leguminous hays, such as clover, alfalfa, cow peas and soy beans. The concentrated feeds that are rich in protein are usually cotton seed meal, linseed meal, some of the distillers' feeds and the glutens from the starch factories.

CARBOHYDRATES.

Carbohydrates are the starches, sugars and resins of the feeds. While protein goes to make muscle and the protein of the milk, carbohydrates go to make the sugars and fats of the milk and the heat of the body. Therefore it is necessary to have at least 60 per cent more carbohydrates in the feeds than the amount of milk sugar found in the milk that the cow produces.

FATS.

Fats perform the same function as the carbohydrates in the body. Oils and fats as found in plants go to make fat in the body of the cow and also furnish heat. To a certain extent fats in the feed enter into the fat produced in the milk. Fat is not of as great importance as the other two constituents, but some is needed.

RATIO OF CONSTITUENTS.

Experiments and experience have proven that the proper ration of these constituents in feeds should be as follows: About $21\frac{1}{2}$ pounds of protein, 13 pounds of carbohydrates, and $\frac{1}{2}$ pound of fat. This is for a cow that weighs 1,000 pounds and gives 20 pounds of milk per day. It is necessary to furnish these constituents in a ratio something like this to produce economical results.

ILLUSTRATION OF CONSTITUENTS.

An appropriate illustration of these constituents can be found by comparing them to the building of a fence. We will suppose that the carbohydrates are the boards, the fats the posts and the proteins the nails.

It takes a certain number of nails, posts and boards to make an efficient fence. If more nails are used, it is a waste; if less are used the fence will be inefficient. Comparatively the same relation exists between the constituents of the feeds. It is not absolutely necessary to have the ration mathematically correct. If the feeder feeds a large variety of feeds, he invariably gets the constituents in the proper proportion. It is the man who feeds one or two feeds to his cow that does not secure the proper results.

NUTRIENTS IN A DIGESTIBLE FORM.

All feeds should have their nutrients in a digestible form. Shoe pegs contain approximately the same chemical composition as oats, but not in a digestible form. Palatability also has much to do in feeding for economical production. Feeds can be made palatable by mixing them, moistening them, and sometimes by heating them. A good feeder recognizes the value of this. Succulence is another important factor which nature furnishes while the cows are in pasture, but during the winter it should be artificially furnished, and this is done very economically by means of the silo.

PROPORTION OF ROUGHAGE TO CONCENTRATES.

The proportion of roughage to the concentrates varies according to the type of the animal. A large cow usually handles more roughage in proportion to the concentrates than a small cow. As for instance, Holsteins are capable of producing more milk solids from roughage than from concentrates, and the Jersey cow is capable of producing more solids from the concentrates. As a rule about one-third of the ration should be concentrates and the remaining two-thirds roughage. A good way to feed, however, is to feed all the roughage that the animal desires and will easily clean up, and feed concentrates in proportion to the amount of milk that the cow produces. One pound of feed should be fed, as a rule, to every two pounds of milk produced.

WHEN BUYING DON'T IGNORE FERTILIZING ELEMENTS.

When buying feeds the fertilizing elements in the feed should not be ignored. In fact, this point should be kept very clearly in mind when buying feeds. Cotton seed meal is usually rich in nitrogen and its fertilizing equivalents amount to about \$21 per ton, compared with the ordinary fertilizers purchased and placed on the farms. Many of the distillery feeds are valuable as fertilizers as well as feeds. Hence, a feed that is high in protein, rich in phosphoric acid and potash, other things being equal, is to be desired.

PREPARATION OF ANIMAL.

To feed a cow for the greatest production one must prepare the animal somewhat, previous to the milk period. Hence, good feeds should be fed before parturition. When a cow becomes dry—and she should usually be dry for 6 weeks or 2 months—she should be fed the very best and proper of feeds and in such quantities as she can easily consume, in order that she may be in good shape for the period of lactation. When the cow is near parturition she should be in a fleshy or fat condition, and when this is followed up with a good ration the animal invariably produces her maximum quantity of milk.

COST OF FEEDS.

There is much relative difference in the cost of various feeds, compared with their nutrients. The feed which contains the least amount of indigestible material and the least amount of water should be given the preference in price.

In feeding dairy cows it is necessary to have a cheap bulk ration, grown on the farm. For the past few years the cheapest has been corn and corn silage. The validity of this statement can be easily illustrated by the fact that a good average yield of ensilage per acre is fourteen tons. This when put into the silo and fed to cows at the rate of 30 pounds per day, would feed a cow about 200 days for \$6. The same cow would consume about $2\frac{1}{2}$ tons of hay, which at the present time would be worth \$45. However, corn cannot be fed exclusively. Many "side dishes" should be given to increase the cow's appetite. The object of this is to develop the eating habit by alluring the cow with a variety of feeds and inducing her to eat more by giving her the feeds that are appetizing to her. The more she eats, the more she wants to eat. The easiest way to balance a ration is to supplement the bulk ration with the greatest variety of different feeds that can be secured, letting corn and its products, especially hominy, predominate.

THE PROOF OF THE PUDDING IS IN THE EATING.

We are pleased to announce that Ohio cows now hold the highest records in the world. Banostine Belle De Kol holds the world's record for butter fat for all breeds and stands at the head of the Holstein-Friesian breed. Banostine Belle De Kol, Highlawn Hartog De Kol and Daisy Grace De Kol, who are all in the same herd, will average over 1,000 pounds of butter fat each, for one year. This is the greatest producing herd in the world, and it is an Ohio herd. Spotswood Daisy Pearl, another Ohio cow, has just completed a year's record of 957 pounds of butter fat, which is equal to 1,225 pounds of commercial butter. This places her at the head of the Guernsey breed.

MOTTO.

Feed plenty, feed good feeds, feed a variety, feed often and you will be sure to get results.

PHOSPHORUS AND LIME FOR CHICKEN FEEDING.

By F. S. JACOBY,

Agricultural College, Ohio State University, Columbus, Ohio.

The importance of phosphorus and lime in a ration for growing chicks is recognized by practically all poultrymen. The grains and foods ordinarily used for poultry feeding do not contain sufficient phosphorus and lime to supply the needs of a growing chick. This lack may be supplied by the addition of animal by-products to the ration. Animal by-products, besides supplying lime and phosphorus, also add to the palatability and digestibility of the ration.

NAME MATERIALS CONTAINING LIME AND PHOSPHORUS THAT ARE VALUABLE
AS CHICK FEEDS.

There are a number of foods on the market which contain sufficient lime and phosphorus to make them valuable as chick feeds. Among these are ground or granulated rock phosphate, ground oyster shell, granulated bone or bone meal, green cut bone and certain limestone grits. In a series of experiments at the New York (Geneva) Experiment Station, it was found that the mineral ash served a greater purpose than merely assisting in grinding the food. The mixing of sand in the food resulted in better health for the chicks and a more efficient use of the food, and ground rock phosphate and sand together gave better results in growth and digestion than sand alone. The addition of ground rock phosphate alone was followed by better growth and less consumption of food than the addition of finely ground oyster shell. Ground oyster shell was less healthful and less efficient than fine sand. These results would seem to indicate that mineral ash is necessary in the ration and its efficiency is increased when a good hard grit is present. The general use of ground rock phosphate is not recommended as a grit, although its value in supplying mineral matter is undoubted. The preparations of this material on the market are too expensive to justify their exclusive use. Finely ground, cut bone that is sweet and fresh will not only supply the lime and phosphorus, but will prove valuable as a source of protein. A combination of fresh ground bone or poultry bone with a hard quartz

grit will supply the necessary ash and the grinding material for rendering it available. Certain limestone grits can be purchased almost as cheaply as those containing no lime, but as a rule they are too soft to serve as grit. This is the objection to most dual purpose grits; if they are too hard the food material is not available, and if too soft they lose their grinding value. The cost of these preparations is usually higher than the results of their general use will justify, and the farmer and poultryman must have a thorough understanding of poultry feeding before they can be fed intelligently and economically.

TANKAGE AS A FEED FOR SWINE.

BY B. E. CARMICHAEL,

Chief of Animal Husbandry, Experimental Station, Wooster, Ohio.

Tankage, a packing house by-product consisting of bones, scraps of flesh, blood and offal of the packing industry, specially prepared for feeding purposes, has within recent years come to be extensively used by corn belt swine feeders. The fact that tankage is relatively high in protein and ash, nutrients which are not sufficiently abundant in corn for the needs of growing, fattening swine, makes it an exceedingly valuable supplement for use in connection with corn—the one farm-grown feed that constitutes by far the largest part of the ration.

USE FEEDING TANKAGE INSTEAD OF FERTILIZER TANKAGE.

Not all tankage is of equal value for feeding purposes, since it may contain, according to its guaranteed composition, as low as 40% or as high as 60% protein. Either grade is a useful feed, but should be purchased and used on the basis of its composition rather than with the supposition that all tankage is alike and of equal feeding value. Even fertilizer tankage, which the manufacturers never intended (or, at any rate, never should have intended) for feeding purposes, has been sold for feed, and, in at least one instance, hogs did not do well after eating it. In the purchase of tankage, then, feeders should see to it that the tankage they buy is manufactured for feeding rather than for fertilizing purposes, and should know what grade is being purchased, so that full value will be received for the money expended, and so that the tankage can be fed intelligently.

NO DISEASE GERMS IN PROPERLY PREPARED FEEDING TANKAGE.

On account of the fact that tankage is a packing house by-product many have felt that there might be danger of its carrying disease germs that would cause losses when fed to swine. Tankage is subjected to very high heat in the process of manufacture, and any germs that might possibly be present would be destroyed by this heat. So far as the writer is aware no contagion has ever been spread by the use of tankage. On account of its exceedingly high protein content and high palatability, it is possible that a careless introduction of tankage into the ration would induce sickness on account of too large an amount being eaten at first. Instances have been reported in which this seems to have occurred; however, if reasonable care is exercised, no trouble of this kind need be encountered.

AMOUNT TO FEED.

For growing swine that are being fattened, approximately 10% of the 60% protein tankage, and 90% corn can well be used; if the 40% tankage is used a larger amount would be needed to supply the same amount of protein. If pasturage is available, especially clover or alfalfa, or if well-grown hogs that are mature or nearly mature are being fed, less than the above proportion of tankage would be needed. In fact, with an abundance of clover or alfalfa pasture, it is doubtful if hogs that receive a very light ration of corn would return a profit for any tankage that might be fed, excepting in the case of very young pigs for a few weeks after weaning.

USE DISCRETION IN BUYING FEEDS.

There is a disposition on the part of some feeders to hesitate to purchase tankage or any other commercial feeds. On the other hand, it is possible for feeders to depend so largely upon commercial feeds that they will fail to utilize home-grown feeds to good advantage. Either tendency should be checked, and all feeders of live stock should stand ready to feed any home-grown or any commercial feed that will increase his profits. In order to know which will yield the most profit, the feeder should become familiar with the requirements of the animal he feeds and with the feeding value and market price of the various home-grown and commercial feeds. This knowledge, which may be secured without much effort, will be of great value in making feeding operations more profitable and, therefore, more pleasant.

PROPORTION OF SUPPLEMENTAL FEEDS WITH CORN.

The following shows something of the approximate proportions in which tankage and a number of other supplemental feeds can well be

used for fattening shoats that weigh 100 to 200 pounds. In general, the amount of supplement may well be materially reduced as the fattening period advances.

APPROXIMATE PARTS, BY WEIGHT, OF SUPPLEMENTS TO USE WITH CORN.

	Supplement.	Corn.
Soybeans -----	1	5
Skim milk -----	3	1
Butter milk -----	3	1
Linseed Oilmeal -----	1	5
Meat meal (60% protein)-----	1	9
Tankage (60% protein)-----	1	9
Tankage (40% protein)-----	1	6

Bulletins 209 and 213 and Circular 73 of the Ohio Station which report results secured from experiments in which various supplemental feeds were used with corn, may be had upon request to the Experiment Station, Wooster, Ohio.

ATTENTION!

Complaints reach this Department relative to the quality of Tankage being fed hogs.

Feeders should see that Tankage purchased is manufactured for feeding instead of fertilizing purposes.

Materials sold as a feed should have a feeding stuffs tag instead of a fertilizer tag affixed.

Buyers of tankage, dried blood, blood meal, meat meal, beef scrap, etc., to be used as a feeding stuff, are protected by purchasing only registered goods.

SUGGESTIONS CONCERNING USE OF COMMERCIAL FEEDS.

BY B. E. CARMICHAEL,

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By far the largest need of Ohio farmers for commercial feeds is for those feeds that contain a relatively high percentage of protein. This is true because the ratio made up of farm-grown feeds is more likely to be deficient in protein than in any other food constituent. This, in turn, is largely due to the extensive use of corn (which is relatively low in pro-

tein) in some form or other in practically all live stock feeding operations in Ohio. Young grown animals, or animals that are pregnant or that are producing milk, more frequently suffer from lack of protein in their rations than do mature animals that are fed solely for maintenance, for fattening, or for work purposes.

NEEDS OF DIFFERENT ANIMALS.

The needs of different kinds of animals should be considered in compounding rations. Such feeds should be used as will provide an adequate supply of nutrients in as palatable and wholesome form as is possible. Under some conditions only home-grown feeds would be needed or could be used at a profit. Under other conditions a relatively large use should be made of commercial feeds. Whether home-grown, commercial, or both home-grown and commercial feeds are used, they should be carefully selected, so as to yield the greatest possible profit.

LARGE AMOUNTS OF COMMERCIAL FEEDS SHIPPED INTO OHIO.

Ohio is not supplied with a large amount of cheap and efficient commercial feeds produced within the state. On the contrary, commercial feeds, excepting wheat bran and middlings, are for the most part shipped in from other states. The great demand for bran and middlings has made the price for these by-products so high that many consider them too expensive, except for special use. Moreover, if all of the bran and middlings that would be yielded by the entire average wheat crop of Ohio were sold in the state, only about one ton per year of bran and middlings combined would be provided for each Ohio farm. In view of these facts it is indeed fortunate that there is available for the use of Ohio feeders a large supply of commercial feeds from other states. The fact that many kinds of commercial feeds are available makes it all the more important for feeders to understand the value and limitations of the different kinds.

FEEDS RELATIVELY RICH IN PROTEIN MOST NEEDED.

As previously indicated, feeds relatively rich in protein are most frequently needed, although it sometimes occurs that feeds low in protein are available at prices that make it possible to use them at a profit. Hominy feed, dried beet pulp and some of the mixed feeds are the low protein feeds that are most usually purchased. Feeders should seldom, if ever, pay more than corn is worth per pound for a commercial feed no higher in protein than is corn.

WHY MIXED FEEDS ARE NOT IN FAVOR WITH BEST FEEDERS.

The use of mixed feeds or of "ready rations" is not in high favor with many of the best feeders, as they feel that they can get better results if they do their own mixing of feeds. This plan makes it possible for them to combine feeds in accordance with the needs of their animals. It also makes possible a more intelligent buying of feeds. Feeds vary so much in price from year to year that an economical feed one year might be an extravagant one the next year. Moreover, materials of low feeding value, such as oat hulls, mill sweepings, low grade screenings, etc., are too frequently used in making mixed feed. It should be remembered, however, that mixed feeds may be good and economical feeds. For the owner of a very small number of animals the convenience of mixed feeds is sometimes worth considering. The result of chemical analyses, always useful in indicating the value and limitations of feeds, are of particularly high value in regard to mixed feeds.

REASON FOR NOT MAKING DEFINITE RECOMMENDATIONS OF RATIONS.

It would not be possible even in an article much longer than this to make definite recommendations of rations that would always be economical, since market prices are so important and varying a factor. The Experiment Station is always ready to assist in selecting rations for farm animals upon request. In order to do this intelligently, the Station would need information concerning kind of live stock to be fed and local prices for farm-grown and commercial feeds that are available.

CLASSIFICATION OF FEEDING STUFFS.

Feeding stuffs offered for sale in Ohio can for convenience be divided into the following classes:

40% PROTEIN and over: Cotton Seed Meal, Blood Meal, Meat Scraps, Feeding Tankage, etc.

30% to 40% PROTEIN: Linseed Meal, some Distillers' Grains, Soy Beans, etc.

20% to 30% PROTEIN: Gluten Feed, Corn Germ Meal, Calf Meal, Dried Distillers' Grains, some Malt Sprouts, Special Dairy Rations, Cow Peas, etc.

10% to 20% PROTEIN: Dairy Feed, Wheat Bran, Wheat Middlings, Molasses Dairy Feed, some Distillers' Grains, Barley Meal, Corn, Wheat, some Hominy Feed, Alfalfa Feed, Sugar Feed, some Mixed Feed, etc.

Below 10% PROTEIN: Corn and Oats Chop, Cotton Seed Hulls, Buckwheat Hulls, Low Grade Oats Feed, Corn Bran, some Mixed Feeds, some Hominy Feeds, Dried Beet Pulp, etc.

THE WEIGHT OF ONE QUART OF VARIOUS FEEDING STUFFS.

The following table gives the average weight of one quart of the feeds named therein, and will be found to be useful to the feeder :

Cotton-seed meal.....	1.5 lbs.
Linseed meal, N. P.....	0.9 lbs.
Linseed meal, O. P.....	1.1 lbs.
Glutten meal.....	1.7 lbs.
Glutten feed.....	1.3 lbs.
Germ oil meal.....	1.4 lbs.
Distillers' dried grains.....	0.5-0.7 lbs.
Malt sprouts.....	0.6 lbs.
Brewers' dried grains.....	0.6 lbs.
Wheat middlings (flour).....	1.2 lbs.
Wheat middlings (Standard).....	0.8 lbs.
Mixed feed, wheat.....	0.6 lbs.
Wheat bran.....	0.5 lbs.
Oat middlings.....	1.5 lbs.
Rye feed	1.3 lbs.
Oats, whole.....	1.0 lbs.
Wheat, whole.....	1.9 lbs.
Barley, whole.....	1.5 lbs.
Rye, whole.....	1.7 lbs.
Corn, whole.....	1.7 lbs.
Oats, ground.....	0.7 lbs.
Wheat, ground.....	1.7 lbs.
Barley meal.....	1.1 lbs.
Rye meal	1.5 lbs.
Corn meal	1.5 lbs.
Corn and cob meal.....	1.4 lbs.
Corn bran	0.5 lbs.
Hominy meal.....	1.1 lbs.
Oat feed	0.8 lbs.

COMPOSITION OF LEADING FARM PRODUCTS.

It has seemed advisable to enlarge the list of Farm Products hitherto published in the bulletins of this Department, so as to enable the purchaser of feed stuffs to compare the same with ordinary feed stuffs produced upon the farm, which are not subject to official inspection and analysis. As the money value of the latter is fairly well known to the

feeder, he can readily ascertain by comparison whether he is getting value received in purchasing the commercial articles.

Feeding Stuffs.	Percentage Composition.		
	Protein.	Fat.	Fiber.
Concentrates.			
Corn dent	10.3	5.0	2.2
Corn bran	9.0	5.8	12.7
Wheat, spring	12.5	2.2	1.8
Wheat, winter	11.8	2.1	1.8
Wheat screenings	12.5	3.0	4.9
Rye	10.6	1.7	1.7
Barley	12.4	1.8	2.7
Oats	11.8	5.0	9.5
Rice	7.4	0.4	0.2
Buckwheat	10.	2.2	8.7
Sorghum Seed	9.1	3.6	2.6
Broom corn seed	10.2	3.0	7.1
Kafir-corn seed	9.9	3.0	1.4
Millet Seed	11.8	4.0	9.5
Hungarian grass seed	9.9	4.7	7.7
Flax seed	22.6	33.7	7.1
Flax seed ground	21.6	30.4	7.3
Linseed meal (old process)	32.9	7.9	8.9
Linseed meal (new process)	33.2	2.0	9.5
Wheat bran	16.0	4.0	8.1
Wheat middlings	15.6	4.0	4.6
Cotton seed	18.4	19.9	23.2
Sunflower seed	16.3	21.2	29.9
Sunflower-seed cake	32.8	9.1	13.5
Peanut kernel (without hulls)	27.9	39.6	7.0
Soy bean	39.0	16.9	4.8
Cow pea	20.8	1.4	4.1
Roughage.			
Hay from Grasses.			
Hay from mixed grasses	7.4	2.5	27.2
Timothy, all analyses	5.9	2.5	29.0
Timothy, cut in full bloom	6.0	3.0	29.6
Timothy, cut soon after bloom	5.7	3.0	28.1
Timothy, cut when nearly ripe	5.0	2.2	31.1
Orchard grass	8.1	2.6	32.4
Red top, cut at different stages	7.9	1.9	28.6
Red top, cut in bloom	8.0	2.1	29.9
Kentucky blue grass	7.8	3.9	23.0
Hungarian grass	7.5	2.1	27.7
Barley hay, cut in milk	8.8	2.4	24.7
Hay from Legumes.			
Red clover	12.3	3.3	24.8
Red clover in bloom	12.4	4.5	21.9
Red clover, mammoth	10.7	3.9	24.5
Alsike clover	12.8	2.9	25.6
Crimson clover	15.2	2.8	27.2
Alfalfa	14.3	2.2	25.0
Cow pea	16.6	2.2	20.1
Soy bean	15.4	5.2	22.3
Pea vine	13.7	2.3	24.7
Straw.			
Wheat	3.4	1.3	38.1
Rye	3.0	1.2	38.9
Oat	4.0	2.3	37.0
Barley	3.5	1.5	36.0
Wheat chaff	4.5	1.4	36.0
Oat chaff	4.0	1.5	34.0
Buckwheat	5.2	1.3	43.0
Soy bean	4.6	1.7	40.4
Horse bean	8.8	1.4	37.6

COMPOSITION OF LEADING FARM PRODUCTS—Concluded.

Feeding Stuff.	Percentage Composition.		
	Protein.	Fat.	Fiber.
Roots and Tubers.			
Potato	2.1	0.1	0.6
Beets, common	1.5	0.1	0.9
Beet, sugar	1.8	0.1	0.9
Beet, mangel	1.4	0.2	0.9
Turnip	1.1	0.2	1.2
Carrot	1.1	0.4	1.3
Artichoke	2.6	0.2	0.8
Corn Forage, Field Cured.			
Corn stover	3.8	1.1	19.7
Fodder corn	4.5	1.6	14.3
Corn husks	2.5	0.7	15.8
Corn leaves	6.0	1.4	21.4
Miscellaneous.			
Corn cob	2.4	0.5	30.1
Oat hulls	3.3	1.0	29.7
Dried blood	84.4	2.5	.....
Meat scrap	71.2	13.7	.....
Beet pulp	0.9	.....	2.4
Dried sediment from distillery slops.....	27.4	12.3	8.0

TABULATED ANALYSES OF FEED STUFFS FOR THE YEAR ENDING DECEMBER 31, 1912.

All Analyses Made by Ohio State University Chemist, Columbus, Ohio.

Samples Retested and Results Confirmed.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
60	ABEL BROS., CLEVELAND, OHIO. Arcade Chop Feed	Claimed Pound	7.60 9.63	3.29 2.68	6.11 4.72	Corn, Oat Hulls				Ingredients as guaranteed.
49	ACME-EVANS COMPANY, INDIANAPOLIS, IND. Acme Feed	Claimed Pound	16.50 18.38	4.00 4.09	9.00 7.83	Bran., Midds., Screenings, Mill Run				Ingredients as guaranteed.
92	AJAX MILLING & FEED CO., NEW YORK, N. Y. Ajax Flakes	Claimed Pound	20.00 32.37	11.00 11.04	14.00 13.07	Drillers' Grains				Ingredients as guaranteed.
222	AMENDT MILLING CO., MONROE, MICH. Amco Scratch Grain	Claimed Pound	10.00 9.90	2.50 3.10	5.00 2.90	Wheat, Wheat Screenings, Corn, Kafir Corn, Buckwheat, Clipped Oats, Corn, Germ, Oil Cake, Sunflower, Barley, Charcoal, Shell and Grit				Marble grit.
293	Amco Chick Feed	Claimed Pound	10.00 10.95	2.50 2.10	5.00 2.05	Cracked Corn, Wheat Screenings, Hulled Oats, Millet Seed, Grit and Kafir Corn				Contains 5% sand
83	AMERICAN COTTON OIL CO., THE NEW YORK, N. Y. Choice Cotton Seed Meal	Claimed Pound	41.00 39.38	9.00 8.93	10.50 8.32	Cottonseed Meal				Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
251	AMERICAN DIAMALT CO., CINCINNATI, OHIO. Dried Malt Grains.	Claimed Found	18.00 23.10	5.00 5.35	20.00 16.85	Refuse from Malt Extracts	Ingredients as guaranteed.			
79	AMERICAN HOMINY CO., INDIANAPOLIS, IND. Homco Feed	Claimed Found	9.50 10.50	7.00 6.76	7.00 5.40	Made from Corn	Ingredients as guaranteed.			
172	Homcoline Feed	Claimed Found	17.00 17.94	5.00 6.08	7.00 5.62	Corn Product	Ingredients as guaranteed.			
403	AMERICAN LINSEED CO., NEW YORK, N. Y. & CHICAGO, ILL. Old Process Oil Meal	Claimed Found	34.00 36.80	5.00 6.35	8.00 7.35	Linseed Oil Meal	Ingredients as guaranteed.			
321	AMERICAN MAIZE OIL REFINING CO., INDIANAPOLIS, IND. Mazina Germ Oil Meal	Claimed Found	18.00 19.15	6.00 7.90	3.00 4.50	Ground Hominy Hearts	Ingredients as guaranteed.			
347	AMERICAN MALTING COMPANY, SOHNGER BRANCH, HAMILTON, OHIO. Sprouts	Claimed Found	25.37 27.10	1.63 2.85	13.20 12.80	From Barley	8% Weed seeds.			
14	AMERICAN MILLING COMPANY, CHICAGO, ILL. Amco Cotton Seed Meal	Claimed Found	41.00 41.56	8.00 10.06	10.00 9.94	Cottonseed Product	Ingredients as guaranteed.			

28	Sucrene Dairy Feed.....	Claimed Found	16.50 19.69	3.50 4.83	12.00 13.41	Cottonseed Meal, Gluten Feed, Oat Clippings, Screenings.....	Ingredients as guaranteed.
36	Amco Hen Feed.....	Claimed Found	10.00 13.56	3.00 3.82	5.00 4.09	Corn, Wheat, Barley, Kaffir, Linseed Cake, Sunflower, Buckwheat.....	Ingredients as guaranteed.
135	Amco Chick Feed.....	Claimed Found	10.00 12.25	3.00 2.73	5.00 2.90	Corn, Wheat, Kaffir, Millet, Oil Cake.....	Ingredients as guaranteed.
156	Amco Hen Feed, 5% Grit.....	Claimed Found	10.00 11.81	3.00 3.44	5.00 2.95	Corn, Wheat, Barley, Kaffir, Oil Cake, Sunflower, Grit.....	Ingredients as guaranteed.
175	Sucrene Alfalfa Horse and Mule Feed.....	Claimed Found	11.00 11.81	2.50 3.00	12.00 12.92	Corn, Rolled Oats, Rolled Barley, Alfalfa, Cottonseed Meal, Molasses, Recleaned Wheat Screenings, $\frac{1}{2}$ of 1% Salt.....	Ingredients as guaranteed.
299	Amco Old Process Linseed Meal.....	Claimed Found	32.00 32.55	6.00 8.35	11.00 8.15	Flaxseed Product.....	Ingredients as guaranteed.
303	Sucrene Horse and Mule Feed.....	Claimed Found	10.00 14.45	2.50 2.75	12.00 7.75	Corn, Cottonseed Meal, Molasses, Ground and Boiled Grain Screen- ings, $\frac{1}{2}$ % Salt.....	Ingredients as guaranteed.
307	Sucrene Mixing Feed.....	Claimed Found	12.00 14.35	2.50 3.45	12.00 10.40	Gluten Feed, Molasses, Oat Clip- pings, Ground and Boiled Grain Screenings, $\frac{1}{2}$ % Salt.....	Ingredients as guaranteed. High in stems.
352	Amco Alfalfa Meal.....	Claimed Found	13.00 14.35	2.00 1.55	30.00 31.80	Alfalfa Hay.....	Ingredients as guaranteed.
372	Amco Horse Feed.....	Claimed Found	10.00 11.20	3.50 3.50	7.50 6.85	Corn, Rolled Oats, Rolled Barley, Wheat Bran.....	Ingredients as guaranteed.
350	AMMANN, W.M., CINCINNATI, OHIO. Malt Sprouts.....	Claimed Found	15.00 26.35	2.00 1.75	18.00 11.75	From Barley.....	Ingredients as guaranteed.
328	ARMOUR FERTILIZER WORKS, CHICAGO, ILL. Meat Meal.....	Claimed Found	60.00 62.20	10.00 8.20	1.50 4.75	Meat Residue.....	Ingredients as guaranteed.
130	ARMSTRONG & COMPANY, ZANESVILLE, OHIO. Eagle Chop.....	Claimed Found	10.00 8.75	5.00 3.33	6.00 2.73	Oats, Corn, Corn Products.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.	Crude Fat.	Crude Fiber.	Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.		
2223	ARMSTRONG, J. E., BELLEFONTAINE, OHIO. Chop Feed.....	Claimed Found	8.00 10.70	2.50 4.00	10.00 7.60	Corn, Oats, Corn Bran, Corn Sift- ings.....	Contains oat hulls.
388	ASHLAND STOCK FOOD CO., ASHLAND, OHIO. Ashland Calf Food.....	Claimed Found	21.00 19.15	4.00 3.15	5.50 4.90	Middlings, Gluten Meal, St. John's Bread, Salt and Hip.....	Ingredients as guaranteed.
268	BADENOUGH & COMPANY, J. J., CHICAGO, ILL. Graingold Horse and Cattle Feed.....	Claimed Found	7.50 6.90	2.50 1.70	8.00 8.30	Corn Flour, Corn Grits, Oat Hulls, and Light Oats.....	Ingredients as guaranteed.
355	Cer-lay Poultry Feed, with Grit.....	Claimed Found	9.50 10.55	2.50 2.65	5.00 2.40	Corn, Wheat, Barley, Oats, Kaffir, Sunflower, Not over 4% Grit, 4% Shell, 1% Charcoal.....	Quarts grit.
356	Cer-lay Poultry Feed, no Grit.....	Claimed Found	9.50 11.55	2.50 3.25	5.00 2.40	Corn, Wheat, Barley, Oats, Kaffir, Sunflower, Not over 1% Char- coal.....	Ingredients as guaranteed.
63	BAILEY, E. I., CLEVELAND, OHIO. "Pearl" Hominy Feed.....	Claimed Found	9.00 11.81	7.00 8.85	8.00 3.95	Corn Product.....	Ingredients as guaranteed.
174	BAIRD BROS., NELSONVILLE, OHIO. Chop.....	Claimed Found	8.50 10.06	3.50 4.13	5.00 1.97	Corn, Corn Bran, Screenings, Oats.....	Ingredients as guaranteed

131	BALTIC MILLS, J. & S. EMISON & COMPANY, VINCENNES, IND. Blue Diamond Little Chick.....	Claimed Pound	10.00 10.06	4.00 3.67	3.50 2.90	Wheat, Corn, Millet, Field Seeds, Carbonate of Lime.....	Ingredients as guaranteed.
197	Blue Diamond Scratch Poultry Feed.....	Claimed Pound	10.75 10.10	3.75 2.50	3.50 3.30	Wheat, Corn, Kaffir Corn, Oats, Barley, Sunflower, Field Seeds, Carbonate of Lime.....	Ingredients as guaranteed.
398	Hominy Feed.....	Claimed Pound	9.18 9.90	9.10 6.95	5.60 3.75	Corn Product.....	Ingredients as guaranteed.
317	BARTLETT COMPANY, J. E. JACKSON, MICH. Farmer Brand Cotton Seed Meal.....	Claimed Pound	41.00 37.55	7.00 8.70	10.00 9.70	Cottonseed Meal.....	Contains cotton seed hulls.
16	BARWELL, J. W., WAUKEGAN, ILL. Blatchford's Calf Meal.....	Claimed Pound	25.00 26.00	5.00 4.57	5.00 7.23	Locust Meal, Wheat Flour, Flaxseed, Cottonseed Meal, Beans, Lentils.....	Ingredients as guaranteed.
58	Blatchford's "Fill the Basket" Egg Mash.....	Claimed Pound	19.00 24.06	5.00 3.97	10.00 9.94	Dried Milk, Barley, Beef Scraps, Alfalfa, Corn Meal, Oil Meal, Oat Meal, Fish, Pepper.....	Sand, 1.40%; ingredients as guaranteed.
67	Blatchford's Milk Mash for Poultry.....	Claimed Pound	18.00 23.62	6.50 4.31	6.00 6.60	Dried Milk, Corn Meal, Oat Meal, Beef Scraps, Fish, Barley.....	Sand, 1.40%; ingredients as guaranteed.
170	Blatchford's Sugar and Flaxseed..... BASH & COMPANY, S., FT. WAYNE, IND.	Claimed Pound	27.00 21.88	10.00 9.57	5.75 8.59	Locust Bean Meal, Flaxseed, Lentils, Gentian, Fenugreek, Anise.....	Ingredients as guaranteed.
326	Bash's Chicken Feed..... BELL & COMPANY, M. E., GALLIPOLIS, OHIO.	Claimed Pound	9.50 11.90	3.00 3.40	5.00 3.20	Kaffir Corn, Wheat, Barley, Rye, Corn, Grit, Charcoal and Beef Scrap.....	Contains weed seeds; grit is Calcium Carbonate, no beef scrap.
46	Chop Feed.....	Claimed Pound	7.50 10.50	3.00 4.33	5.10 3.88	Corn, Oats, Light Wheat.....	Ingredients as guaranteed.
227	BEEBOWER BROS., WILLOUGHBY, O. "Correct Chicken Feed".....	Claimed Pound	7.00 10.75	2.00 3.30	5.00 3.40	Wheat, Corn, Oats, Barley, Kaffir Corn, Buckwheat, Sunflower, Charcoal, Oil Cake.....	No oil cake.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Found.	Per Cent.	Found.	Per Cent.	Found.		
300	BEEBOWER BROS., WILLOUGHBY, OHIO—Concluded. "Correct Poultry Mash"	Claimed Found	10.00 17.65		2.50 4.10		5.00 5.00		Corn Meal, Gluten Feed, Wheat Middlings, Wheat Bran, Heneta Bone Grits, Alfalfa, Oilmeal, Beef Scraps.....	Grit is phosphatic slag. Contains 11.70% insoluble mineral matter.
17	BECK CEREAL COMPANY, THE, DE TROIT, MICH. Royal Corn & Oat Chop Feed	Claimed Found	8.31 10.94		5.10 5.12		5.81 7.23		Corn, Oat Middlings, Oat Shorts, Oat Hulls.....	Ingredients as guaranteed.
224	BERDAN & COMPANY, TOLEDO, OHIO. Mfd. by The Quaker Oats Co., Chicago, Ill. Old Tavern Scratch Feed	Claimed Found	10.00 10.75		2.50 3.55		5.00 3.20		Wheat, Barley, Kaffir Corn, Buckwheat, Corn, Sunflower Seed, Charcoal.....	Contains shell and marble
225	Old Tavern Chick Feed	Claimed Found	10.00 11.80		2.50 3.15		5.00 4.20		Wheat, Kaffir Corn, Millet, Corn, Oat Groats, Pigeon Grass, Charcoal, Marble Grit.....	Ingredients as guaranteed.
56	BILES & COMPANY, THE J. W., CINCINNATI, OHIO. Union Grains, Ubiko, Biles' Ready Dairy Ration	Claimed Found	24.00 25.81		7.00 5.87		9.00 8.28		Distillers' Grains, Cottonseed Meal, Linseed Meal, Midds, Bran, Hominy Meal, Malt Sprouts, Salt.....	Ingredients as guaranteed.
97	Ubiko Horse and Stock Feed	Claimed Found	16.00 15.75		6.00 6.08		9.00 8.25		Wheat Middlings, Hominy, Meal, Bran, Dist. Grains, Linseed Meal.....	Ingredients as guaranteed.
249	Pourea (XXXX) Distillers' Dried Grains	Claimed Found	31.00 30.45		12.00 11.80		13.00 11.80		Distillers' Dried Grains.....	Ingredients as guaranteed.

354	BLUMER-SARTAIN PACKING CO., THE, COLUMBUS, OHIO.	Ohio's Pride Tankage for Hogs.....	Claimed Pound	36.95 36.10	13.65 13.80	2.75 2.80	Meat Product.....	Ingredients as guaranteed.
386	BOTZUM BROS., AKRON, OHIO.	Dirigo Brand Cotton Seed Meal.....	Claimed Pound	41.00 38.65	7.00 8.60	10.50 7.95	Cottonseed Meal.....	Ingredients as guaranteed.
407		Crown Brand Scratching Feed.....	Claimed Pound	10.94 12.45	2.60 2.35	8.50 1.90	Kaffir Corn, Oil Cake, Grit, Oyster Shell, Barley, Wheat, Buckwheat.....	Ingredients as guaranteed.
408		Corn, Oats and Barley Chop.....	Claimed Pound	10.50 12.05	4.00 4.55	5.00 6.10	Corn, Oats and Barley.....	Ingredients as guaranteed
281	BOWDEN-SNYDER CO., THE, MANSFIELD, OHIO.	Gold Medal Scratch Feed	Claimed Pound	10.00 9.40	3.00 2.40	8.00 2.65	Corn, Wheat, Oats, Kaffir Corn, Buckwheat, Sunflower and Grit.....	Marble grit.
10	BRODE, F. W., MEMPHIS, TENN.	Owl Brand Cotton Seed Meal.....	Claimed Pound	41.00 40.24	6.00 7.35	10.00 9.48	Decorticated Cottonseed.....	Ingredients as guaranteed.
139	BUCKEYE CEREAL CO., THE, MASSILLON, OHIO.	Buckeye Hominy Feed.....	Claimed Pound	8.30 10.50	6.10 7.95	7.10 4.35	From Corn.....	Ingredients as guaranteed.
211		Buckeye Scratch Feed.....	Claimed Pound	10.00 9.95	2.50 2.10	6.00 2.15	Wheat, Corn, Oats, Kaffir Corn, Mil- let, Sunflower, Wheat Screenings.....	Ingredients as guaranteed.
297		Buckeye Chop Feed.....	Claimed Pound	8.00 9.40	3.50 3.55	8.50 7.95	Corn, Bar Corn, Hominy Feed, Oats, Grain Screenings, By-products and Salt.....	Ingredients as guaranteed.
71	BUCKEYE COTTON OIL CO., THE, CINCINNATI, OHIO.	"Buckeye" Cotton Seed Meal.....	Claimed Pound	38.50 38.50	6.50 8.38	10.00 10.82	Decorticated Cottonseed.....	Contains cottonseed hulls.
226	BUCKEYE REDUCTION COMPANY, THE, FINDLAY, OHIO.	Tankage.....	Claimed Pound	46.80 46.65	18.50 21.05	1.10	Animal Flesh and Bone.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
401	BUNCH COMMISSION CO., T. H., LITTLE ROCK, ARK. Old Gold Cotton Seed Meal.....	Claimed Found	41.00 37.75	9.00 7.85	9.00 8.70	Cottonseed Meal.....	Ingredients as guaranteed.			
389	BURK & SON, P. H., NEW LONDON, O. Herman & McCoy Co.'s Choice Cotton Seed Meal.....	Claimed Found	41.00 40.80	7.00 9.05	12.00 7.95	Cottonseed Meal.....	Ingredients as guaranteed.			
136	BUSH BROS., GALLIPOLIS, OHIO. Dairy Mixed Feed.....	Claimed Found	10.77 11.37	4.20 3.73	8.00 8.00	Bran, Ear Corn Meal, Mill Products	Ingredients as guaranteed.			
80	BYRNES & COMPANY, W. J., CHICAGO, ILL. Royal Poultry Feed.....	Claimed Found	10.00 10.50	3.00 2.96	5.00 2.35	Wheat, Corn, Kafir, Sunflower Oats, Barley, Buckwheat, Grit, Shell, Charcoal.....	Ingredients as guaranteed.			
82	Daisy Chick Feed.....	Claimed Found	10.00 11.81	3.00 2.99	5.00 3.32	Corn, Wheat, Kafir, Oats, Millet, Grit.....	Ingredients as guaranteed.			
90	CANTON FEED MILLING CO., THE, CANTON, OHIO. Very Best C. O. & B. Feed.....	Claimed Found	8.50 9.63	3.50 3.56	7.50 5.08	Corn, Oat Groats, Oat Hulls and Middlings.....	Ingredients as guaranteed.			
114	C. & O. Chop Feed.....	Claimed Found	7.00 8.31	3.50 3.72	9.00 7.96	Corn, Oat Middlings, Oat Groats, Oat Hulls, Oats.....	Ingredients as guaranteed.			
256	C. O. & H. Chop.....	Claimed Found	7.00 9.60	3.50 3.70	9.00 6.70	Yellow or White Corn, Oats, Oat Hulls, Oat Middlings, White Hominy Feed.....	Ingredients as guaranteed.			

214	CARPENTER, E. S., CHICAGO, OHIO. Chop.....	Claimed Found	7.00 9.75	2.00 3.96	10.00 6.00	Corn, Oats and Corn Products.....	Contains oat hulls.
322	CARUTHERSVILLE COTTON OIL CO., NATIONAL STOCK YARDS, ILL. C. V. Cotton Seed Meal.....	Claimed Found	41.00 43.16	7.00 8.25	10.00 6.25	Cottonseed Meal.....	Ingredients as guaranteed.
255	CENTRAL MANUFACTURING CO., LOCKLAND, OHIO. Equity Refined Hog Protein.....	Claimed Found	40.00 39.35	1.00 1.55	8.00 5.80	Animal Tankage.....	Ingredients as guaranteed.
423	CHAMBERLAIN FEED CO., W. F., ST. LOUIS, MO. Chamberlain's Poultry Feed.....	Claimed Found	10.00 12.10	3.50 2.30	6.00 3.35	Wheat, Kafir Corn, Corn, Limestone Grit, Wheat and Oat Screenings.....	Ingredients as guaranteed.
381	CHAMPION FEED MILLING CO., LYONS, IOWA. Champion Molasses Feed.....	Claimed Found	11.00 11.85	2.00 2.65	8.00 8.35	Ground Corn, Wheat Germs, Ground Flax Screenings, Molasses, Charred Peat, Cotton Seed Meal, Wheat Bran.....	Ingredients as guaranteed.
382	Champion Digester Hog Feed.....	Claimed Found	23.60 24.95	2.90 4.25	7.40 5.25	Tankage, Wheat Germs, Ground Flax Screenings, Charred Peat and Molasses.....	Ingredients as guaranteed.
228	CHAMPION FEED MILLS, PIQUA, OHIO. Champion Poultry Food.....	Claimed Found	6.00 10.60	2.50 3.75	14.00 5.85	Wheat, Oats, Corn, Sunflower, Kaf- fir Corn, Charcoal, Broom Corn.....	Ingredients as guaranteed.
30	CHAPIN & COMPANY, HAMMOND, IND. Unicorn Dairy Ration.....	Claimed Found	26.00 28.44	5.50 7.33	10.00 10.64	Distillers' Feed, Cottonseed Meal, Hominy Meal, Gluten Feed, Malt Sprouts, Bran.....	Ingredients as guaranteed.
117	Green Diamond Brand Cotton Seed Meal.....	Claimed Found	41.00 39.37	8.00 8.83	10.00 8.10	Cottonseed Meal.....	Ingredients as guaranteed.
119	Green Diamond Brand Hominy Meal.....	Claimed Found	10.00 9.63	7.00 6.68	5.00 5.39	Made from Corn.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.	Crude Fat.	Crude Fiber.	Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.		
397	CLARKE BROS. & CO., PEORIA, ILL. Empire State Dairy Feed..... CLEVELAND MILLING COMPANY, CLEVELAND, OHIO.	Claimed Found	28.00 30.60	10.00 11.50	12.00 12.15	Distillers' Dried Grains.....	Ingredients as guaranteed.
34	No. 2 Chop Feed..... CLEVELAND & SANDUSKY BREWING CO., THE., SANDUSKY, OHIO.	Claimed Found	9.90 10.06	3.00 3.55	12.00 6.04	Corn, Oat Hulls.....	Ingredients as guaranteed.
11	Dried Brewers' Grains.....	Claimed Found	22.00 26.25	1.25 7.51	11.50 17.59	From Barley.....	Ingredients as guaranteed.
32	Malt Sprouts.....	Claimed Found	23.00 27.56	1.20 1.17	12.00 12.59	From Barley.....	Ingredients as guaranteed.
387	CINCINNATI MALTING COMPANY, CINCINNATI, OHIO. Malt Sprouts.....	Claimed Found	15.00 26.00	2.00 2.70	18.00 10.50	From Barley.....	Ingredients as guaranteed.
285	CLOUGH & COMPANY, O. H., MECHANICSBURG, OHIO. O. H. C. Scratching Feed.....	Claimed Found	10.50 11.25	2.60 3.75	2.55 3.45	Wheat, Buckwheat, Corn, Oats, Sunflower Seed, Kafir Corn, Oil Cake.....	No sunflower seed.
331	O. H. C. Mash Feed.....	Claimed Found	10.50 12.30	3.55 4.65	6.45 5.25	Bran, Middlings, Alfalfa Meal, Oil Meal, Corn Meal, Ground Oats, Salt.....	Ingredients as guaranteed.
332	O. H. C. Chick Feed.....	Claimed Found	10.50 11.05	2.46 2.70	1.84 1.90	Wheat, Corn, Millet, Kafir Corn and Charcoal.....	Ingredients as guaranteed.

177	COATES COMPANY, THE, CHAQRIN FALLS, OHIO. "C. C. Special".....	Claimed Pound	20.00 21.88	4.00 6.88	16.00 9.43	Distillers' Grains, Malt Sprouts, or Brewers' Feed, Hominy Meal, Oil Meal, Cottonseed, Meal, Gluten, Salt, Mill Feed.....	Ingredients as guaranteed.
189	CONTINENTAL CEREAL COMPANY, PEORIA, ILL. Continental Gluten Feed.....	Claimed Pound	29.00 28.00	12.50 13.49	10.50 10.31	A Distilling By-product from Corn.....	Ingredients as guaranteed.
195	COOK & COMPANY, D. S., BASIL, OHIO. Chop Feed.....	Claimed Pound	10.06 10.50	4.04 3.75	8.50 3.20	Shelled Corn, Oats, Screenings, Meal Offal.....	Ingredients as guaranteed.
180	COOK, HENRY, CLEVELAND, OHIO. Scratching Grains.....	Claimed Pound	7.00 11.37	2.50 3.78	9.00 2.92	Cr. Corn, Wheat, Barley, Buckwheat, Sunflower, Charcoal, Shell, Oats.....	Ingredients as guaranteed.
149	COOLVILLE MILL CO., THE, COOLVILLE, OHIO. Mixed Chop.....	Claimed Pound	10.50 10.94	3.50 3.98	5.00 4.76	Corn Meal, Wheat Bran, Other Grains.....	Ingredients as guaranteed.
45	CORN PRODUCTS REFINING CO., NEW YORK CITY, N. Y. Diamond Hog Meal.....	Claimed Pound	18.00 16.75	8.00 21.27	13.00 10.56	Corn, Sterilized Bone.....	Sand, 2.83%; ingredients as guaranteed.
65	Diamond Gluten Meal.....	Claimed Pound	40.00 38.94	1.50 1.86	4.00 2.31	From Corn.....	Ingredients as guaranteed.
70	Buffalo Gluten Feed.....	Claimed Pound	23.00 25.37	2.00 3.45	8.50 8.36	From Corn.....	Ingredients as guaranteed.
390	COSHOCTON PROVISION CO., THE, COSHOCTON, OHIO. Digester Tankage.....	Claimed Pound	38.00 38.60	16.00 16.15	4.00 3.15	Animal Tankage.....	Ingredients as guaranteed
181	CYPHERS INCUBATOR COMPANY, BUFFALO, N. Y. Chick Feed.....	Claimed Pound	10.00 10.94	3.00 2.28	3.20 2.32	Corn, Wheat, Millet, Kafir, Oats.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.	Crude Fat.	Crude Fiber.	Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.		
343	CYPHERS INCUBATOR COMPANY, BUFFALO, N. Y.—Concluded. Laying Mash.....	Claimed Found	15.00 15.95	3.00 4.10	6.00 3.65	Kaffir Meal, Bran, Red Dog, Shorts, Corn Meal, Alfalfa Meal, Blood Meal.....	Ingredients as guaranteed.
344	Fertile Egg Mash.....	Claimed Found	10.00 11.25	3.00 3.55	12.00 3.85	Bran, Middlings, Ground Oats, Corn Meal, Alfalfa Meal.....	Ingredients as guaranteed.
368	Fattening Mash.....	Claimed Found	11.00 11.20	3.00 3.40	5.00 2.60	Kaffir Meal, Wheat Bran, Red Dog, Shorts, Corn Meal, Alfalfa.....	Ingredients as guaranteed.
383	Growing Mash.....	Claimed Found	10.00 14.65	3.00 4.90	10.00 4.10	Ground Oats, Corn Meal, Middlings, Alfalfa Meal, Bone and Meat Meal.....	Ingredients as guaranteed.
424	Developing Feed.....	Claimed Found	10.00 10.85	3.00 3.25	3.20 1.95	Corn, Wheat, Kaffir Corn, Sunflower, Buckwheat, Oats.....	Ingredients as guaranteed.
	DARLING & COMPANY, CHICAGO, ILL.						
2	Darling's Chick Feed.....	Claimed Found	10.00 11.37	2.50 3.05	5.00 2.58	Corn, Wheat, Kaffir, Millet, Grit, Shells.....	Sand, 2.84%; ingredients as guaranteed.
3	Darling's Scratching Feed.....	Claimed Found	10.00 11.37	2.50 3.28	5.00 1.91	Corn, Wheat, Kaffir, Barley, Oats, Buckwheat, Sunflower, Grit, Shells.....	Ingredients as guaranteed.
37	Darling's Mash Food.....	Claimed Found	18.00 20.12	3.50 4.28	10.00 6.08	Corn Meal, Kaffir, Wheat Meal, Bran, Meat Products, Bone, Alfalfa, Grit.....	Sand, 2.22%; ingredients as guaranteed.
	DAVIS, S. P., LITTLE ROCK, ARK.						
206	Good Luck Cotton Seed Meal.....	Claimed Found	41.00 40.95	7.00 8.20	10.50 9.10	Cotton Seed Meal, (Cracked Screened Cake).....	Ingredients as guaranteed.
	DAYTON GRAIN & HAY CO., DAYTON, OHIO.						
229	"Mak-em-lay" Scratch Feed.....	Claimed Found	12.00 10.55	3.00 2.75	5.50 2.00	Corn, Wheat, Buckwheat, Kaffir Corn, Oats, Sunflower.....	Ingredients as guaranteed.

323	Alfalfa Chop Feed.....	Claimed Pound	10.50 12.65	4.25 4.55	5.50 9.10	Corn, Corn Screenings, Oats, Alfalfa Meal, By-products.....	Contains oat hulls.
59	DEUTSCH, HERMAN, MILWAUKEE, WIS. Climax Corn Distillers' Grains.....	Claimed Pound	30.00 36.31	10.00 11.81	15.00 13.01	Distillers' Grains.....	Ingredients as guaranteed.
84	DEWEY BROS. CO., THE, BLANCHESTER, OHIO. Eagle Three D Grains.....	Claimed Pound	30.00 35.88	10.00 8.90	13.00 12.60	Distillers' Grains.....	Ingredients as guaranteed.
148	Corn Three D Grains.....	Claimed Pound	26.00 25.37	9.00 13.61	13.00 9.57	Distillers' Grains.....	Ingredients as guaranteed.
151	Buckeye Gluten Feed.....	Claimed Pound	20.00 18.81	5.00 6.39	15.00 15.38	Distillers' Grains.....	Ingredients as guaranteed.
187	Queen Cotton Seed Meal.....	Claimed Pound	41.00 39.37	7.00 7.64	10.00 8.68	Cottonseed Product.....	Ingredients as guaranteed.
338	Bourbon Three D Grains.....	Claimed Pound	24.00 25.85	8.00 8.95	14.00 13.00	Distillers' Dried Grains.....	Ingredients as guaranteed.
41	DEWINE COMPANY, THE JOHN, YELLOW SPRINGS, OHIO. Dewine's Laying Feed.....	Claimed Pound	11.38 11.37	3.37 3.03	3.08 2.46	Kafir, Peas, Sundowner, Corn, Wheat, Buckwheat, Barley.....	Ingredients as guaranteed.
43	Dewine's Chop Feed.....	Claimed Pound	10.00 10.94	4.00 3.57	7.00 5.32	Corn, Oats, By-products of Poultry Feed.....	Ingredients as guaranteed.
210	Dewine's Chick Feed.....	Claimed Pound	10.85 10.40	3.15 3.40	3.75 2.50	Kafir Corn, Millet, Flaxseed, Corn and Wheat.....	Ingredients as guaranteed.
95	DICKINSON COMPANY, THE ALBERT, CHICAGO, ILL. Crescent Chick Feed.....	Claimed Pound	10.00 10.50	2.50 3.12	5.00 3.13	Corn, Wheat, Oats, Kafir, Millet, Grit.....	Ingredients as guaranteed.
100	King Pigeon Feed.....	Claimed Pound	10.00 12.25	2.50 3.20	5.00 3.22	Corn, Wheat, Peas, Buckwheat, Mil- let, Hemp, Kafir Corn, Grit.....	Ingredients as guaranteed.
125	Pine Tree Scratch Feed.....	Claimed Pound	10.00 9.63	2.50 3.45	5.00 2.90	Corn, Wheat, Oats, Barley, Kafir, Sundowner, Grit.....	Ingredients as guaranteed.
137	Sun Chick Starter.....	Claimed Pound	10.00 12.25	2.50 2.78	5.00 2.97	Corn, Wheat, Kafir, Oats, Millet, Peas, Grit.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
DICKINSON COMPANY, THE ALBERT, CHICAGO, ILL.—Concluded.										
138	Queen Poultry Mash.....	Claimed Found	11.00 10.06	2.50 2.83			10.00 6.54		Alfalfa, Corn Feed Meal, Wheat Meal, Corn Bran, Bran, Beef, Oil Cake.....	Ingredients as guaranteed.
164	Globe Scratch Feed.....	Claimed Found	10.00 11.37	2.50 3.23			5.00 2.69		Corn, Wheat, Barley, Oats, Kaffir Corn, Buckwheat, Sunflower, Oil Cake, Shells and Grit.....	Ingredients as guaranteed.
168	White Cross Scratch Feed.....	Claimed Found	10.00 10.06	2.50 3.09			5.00 2.17		Corn, Wheat, Barley, Oats, Kaffir Corn, Sunflower, Buckwheat, Cracked Shells and Grit.....	Ingredients as guaranteed.
188	White Cross Stock Food.....	Claimed Found	10.00 9.19	3.50 3.49			10.00 4.08		Ground Oats, Ground Barley, Corn Feed Meal, Wheat Meal, Ground Corn Bran, $\frac{1}{2}$ of 1% Salt.....	Ingredients as guaranteed.
193	Alfalfa Meal.....	Claimed Found	12.00 14.45	1.00 2.05			35.00 29.25		Alfalfa Hay.....	Ingredients as guaranteed.
194	Colonial Developing Feed.....	Claimed Found	10.00 10.10	2.50 2.75			5.00 2.40		Corn, Wheat, Kaffir Corn, Hulled Oats, Buckwheat, Millet and Grit.....	Ingredients as guaranteed.
216	White Cross Chick Feed.....	Claimed Found	10.00 10.85	2.50 3.00			5.00 2.00		Corn, Wheat, Kaffir Corn, Millet, Grit.....	Ingredients as guaranteed.
DIXIE MILLS COMPANY, EAST ST. LOUIS, ILL.										
248	Dixie Horse and Mule Feed.....	Claimed Found	12.00 10.50	4.00 2.45			9.00 9.50		Corn, Oats, Ground Alfalfa, Cottonseed Meal, Molasses.....	Ingredients as guaranteed.
DOUGLAS GRAIN & HAY CO., THE, LIMA, OHIO.										
280	Laymore Poultry Feed.....	Claimed Found	10.51 11.76	3.74 5.35			3.51 4.05		Kaffir Corn, Wheat, Oats, Barley, Buckwheat, Sunflower, Charcoal.....	Ingredients as guaranteed.

81	DOUGLAS & COMPANY, CEDAR RAPIDS, IOWA.	Cedar Rapids Gluten Feed.....	Claimed Pound	20.00 22.75	2.00 1.84	8.00 8.30	Made from Corn.....	Ingredients as guaranteed.
EARLY & DANIEL COMPANY, CINCINNATI, OHIO.								
261		C. & O. Chop.....	Claimed Pound	9.38 8.75	3.37 2.65	12.00 3.40	Corn, Oats and 15% Oat Cleanings.....	Ingredients as guaranteed.
262		Cerealina Chop.....	Claimed Pound	13.00 14.00	5.00 4.15	9.00 12.25	Oats, Corn, Alfalfa, Linseed Oil Meal, Wheat Bran.....	Ingredients as guaranteed.
263		Cerealina Scratch.....	Claimed Pound	11.50 11.15	4.00 3.35	3.75 2.80	Wheat, Corn, Cracked Corn, Buck- wheat, Kafir Corn, Sunflower, Oil Cake Meal.....	Ingredients as guaranteed.
264		Eadan Chick Feed.....	Claimed Pound	11.00 12.85	3.50 4.05	5.00 5.65	Cracked Corn, Oats, Wheat, Miscel- laneous Field Seeds and Seed Screenings.....	Ingredients as guaranteed.
267		Alfalfa Cerealina.....	Claimed Pound	23.00 23.20	5.08 5.60	10.00 12.05	Alfalfa Meal, Oil Meal, Cotton Seed Meal, Wheat Bran, Middlings, Corn, Distillers' Grains, Brewers' Grains, Barley Sprouts.....	Ingredients as guaranteed.
EDWARDS & LOOMIS COMPANY, CHICAGO, ILL.								
98		Red Comb Poultry Feed.....	Claimed Pound	10.00 10.50	2.50 3.49	5.00 2.49	Wheat, Corn, Kafir, Barley, Oats, Sunflower, Buckwheat, Grit, Char- coal.....	Ingredients as guaranteed.
105		Red Comb Meat Mash.....	Claimed Pound	15.00 15.31	4.00 3.85	8.00 9.64	Oat Meal, Oil Meal, Corn Meal, Beef Scraps, Bran, Middlings, Alfalfa, Shells, Charcoal.....	Ingredients as guaranteed.
118		Red Comb Fine Chick Feed.....	Claimed Pound	10.00 10.50	2.50 3.13	5.00 2.78	Wheat, Millet, Corn, Kafir, Cut Oats, Grit, Charcoal.....	Ingredients as guaranteed.
127		Cackle Poultry Feed.....	Claimed Pound	9.50 10.50	2.50 3.13	5.00 2.13	Wheat, Corn, Kafir, Barley, Oats, Sunflower, Grit, Shells, Charcoal.....	Ingredients as guaranteed.
208		Harvest Horse Feed.....	Claimed Pound	9.00 11.40	2.00 2.55	15.00 9.80	Alfalfa, Molasses, Corn, Oats.....	Ingredients as guaranteed.
209		Greeno (Horse and Cattle) Feed.....	Claimed Pound	10.00 10.60	0.50 0.60	26.00 16.25	Alfalfa and Molasses.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
246	EDWARDS & LOOMIS COMPANY, CHICAGO, ILL.—Concluded.	Claimed Found	10.00 11.05	2.50 2.60	5.00 2.65				Wheat, Cracked Corn, Kaffir, Millet, Hulled Oats, 6% Grit, 1% Char- coal.....	Contains 3.25% sand.
278	Red Comb Pigeon Feed with Grit.....	Claimed Found	10.00 11.75	2.50 2.15	5.00 2.65				Wheat, Cracked Corn, Hemp seed, Peas, Kaffir Corn, Millet Seed, Buckwheat, 1% Charcoal, not over 5% Grit.....	Quartz grit, 3.7%.
362	Cackle Fine Chick Feed.....	Claimed Found	9.50 11.25	2.50 1.80	5.00 1.55				Cr. Wheat, Millet, Kaffir Corn, Corn, not over 8% Grit, 1% Charcoal.....	Ingredients as guaranteed.
418	Excelsior Horse Feed.....	Claimed Found	10.00 11.30	3.00 3.85	8.00 4.15				Cracked Corn, Barley, Rolled Oats....	Ingredients as guaranteed.
366	ELYRIA MANUFACTURING & POWER CO., THE, ELYRIA, OHIO.	Claimed Found	7.00 11.25	2.00 1.35	12.00 7.00				Wheat, Corn, Sunflower, Buckwheat, Kaffir Corn, Screenings.....	Ingredients as guaranteed.
260	Boss Scratch Feed.....	Claimed Found	26.02 25.15	6.28 6.45	15.39 14.90				Brewers' Grains.....	Ingredients as guaranteed.
61	EMMERT COMPANY, THE F. L., CINCINNATI, OHIO.	Claimed Found	10.00 10.94	7.50 8.41	7.00 4.61				Hull and Hearts of Corn.....	Ingredients as guaranteed.
	Dried Brewers' Grains.....									
	EVANS MILLING COMPANY, INDIANAPOLIS, IND.									
	"Evans Hominy Feed".....									

386	FAULK BROS. COMPANY, THE, EAST LIVERPOOL, OHIO. Mixed Poultry Feed.....	Claimed Found	10.00 11.70	3.00 3.70	5.00 3.20	Corn, Wheat, Barley, Kafir Corn, Sunflower, Buckwheat.....	Ingredients as guaranteed.
258	FERGER & COMPANY, AUGUST, CINCINNATI, OHIO. Feger's "Nutritive" Horse Feed.....	Claimed Found	12.00 12.00	4.00 3.20	10.00 10.30	Oats, Cracked Corn, Wheat Bran, Ground Alfalfa, Cottonseed Meal, Molasses.....	High percentage alfalfa stems.
384	FOLSOM, E. M., CLEVELAND, OHIO. Folsom's Feed for Horses and Cattle.....	Claimed Found	9.19 10.85	3.91 3.30	3.29 2.55	Corn, Oats, Molasses.....	Ingredients as guaranteed.
385	FOLSOM'S No. 2 Chop.....	Claimed Found	9.63 11.65	4.80 0.95	4.15 5.10	Corn, Oat Hulls.....	Ingredients as guaranteed.
247	FLEISCHMAN MALTING CO., THE, CINCINNATI, OHIO. Malt Sprouts.....	Claimed Found	26.25 26.45	2.02 2.60	12.57 10.80	From Barley.....	Ingredients as guaranteed.
384	FULLER, O. A., CONNEAUT, OHIO. Fuller's Mixed Feed.....	Claimed Found	10.00 29.40	2.00 6.15	12.00 16.35	Buckwheat, Bran, Middlings, Cotton- seed Meal.....	Contains buckwheat hulls.
284	GAMBRINUS STOCK COMPANY, CINCINNATI, OHIO. Malt Sprouts.....	Claimed Found	20.00 26.75	0.98 1.55	16.00 10.55	From Barley.....	Ingredients as guaranteed.
186	GARDNER GRAIN & MILL CO., THE W. H., BELLEVUE, OHIO. Gardner's Hominy Feed.....	Claimed Found	10.94 11.37	5.75 6.08	3.10 2.68	Corn Products.....	Ingredients as guaranteed.
218	GATES ELEVATOR COMPANY, CLEVELAND, OHIO. "Quality" Scratch Feed.....	Claimed Found	11.00 10.65	4.50 3.20	4.00 2.95	Corn, Wheat, Barley, Buckwheat, Kafir Corn, Sunflower.....	Ingredients as guaranteed.
219	"Quality" Chick Feed.....	Claimed Found	11.50 9.95	4.00 3.30	4.00 2.65	Oats, Millet, Kafir Corn, Wheat, Corn.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
361	GATES ELEVATOR COMPANY, CLEVELAND, OHIO—Concluded. "Quality" Growing Feed.....	Claimed Found	11.50 12.05	4.00 1.30	4.00 2.10				Cr. Wheat, Corn, Oatmeal, Millet Seed, Kafir Corn.....	Ingredients as guaranteed.
39	GEHRES BROTHERS, PORTSMOUTH, O. Wheat and Corn Bran Mixed.....	Claimed Found	13.60 15.75	4.00 3.81	10.80 9.34				Wheat Bran, Corn Bran.....	Ingredients as guaranteed.
324	GERMAN-AMERICAN SUGAR CO., BAY CITY, MICH. & PAULDING, OHIO. Dried Beet Pulp.....	Claimed Found	8.00 9.10	0.50 1.05	20.00 19.25				Residue of Sugar Beets dried after extraction of sugar.....	Ingredients as guaranteed.
207	GOEKE & COMPANY, F. W., ST. LOUIS, MO. Holstein Sugar Feed.....	Claimed Found	16.00 19.40	3.00 4.00	12.00 11.50				Wheat, Corn, Oats, Barley, Malt Sprouts, Cottonseed Meal, Alfalfa Meal, Molasses, Grain Screenings, Salt.....	Ingredients as guaranteed.
392	Atlas Dairy Feed.....	Claimed Found	20.00 14.35	4.00 4.20	12.00 9.40				Alfalfa Meal, Cottonseed Meal, Meat, Corn, Wheat, Oats, Barley, Malt Sprouts, Brewers' Grains, Salt, Grain Screenings, Molasses	Ingredients as guaranteed.
393	Atlas Brand Rice Meal.....	Claimed Found	10.00 13.90	10.00 13.25	12.00 9.40				Rice Products.....	Ingredients as guaranteed.
393	GOFF-KIRBY COAL CO., THE, CLEVELAND, OHIO. No. 3 Feed.....	Claimed Found	10.00 11.10	2.25 2.15	5.0 4.25				Cr. Corn, Oats, Wheat, Kafir Corn, Buckwheat, Sunflower.....	Ingredients as guaranteed.

42	GOLDCAMP MILL COMPANY, THE, IRONTON, OHIO.	Mixed Feed.....	Claimed Found	13.78 15.31	4.23 6.58	7.55 7.29	Wheat, Corn Screenings.....	Ingredients as guaranteed.
73		Bran.....	Claimed Found	14.00 13.13	4.00 4.36	10.00 12.86	Wheat Bran, Corn Bran.....	Ingredients as guaranteed.
325	GOOD LUCK MILLS, ST. LOUIS, MO.	Good Luck Scratch Feed.....	Claimed Found	10.00 10.90	3.60 3.30	6.00 2.45	Wheat, Corn, Oats, Barley, Kaffir, Milo Maize, Sunflower, Grit, Re- cleaned Seeds.....	Ingredients as guaranteed.
353		Good Luck Chick Feed.....	Claimed Found	10.00 11.40	3.60 3.65	6.00 2.35	Wheat, Corn, Millet, Kaffir, Milo Maize, Grit, Re-cleaned Seeds.....	9% weed seeds.
13	GRAHAM & BLACK COMPANY, LANCASTER, OHIO.	Molena.....	Claimed Found	9.19 11.81	4.02 4.10	4.21 2.91	Corn, Oats, Screenings, Corn Bran.....	Ingredients as guaranteed.
142	GRAY & SMITH, WOOSTER, OHIO.	Blue Label Chick Feed.....	Claimed Found	10.00 10.06	3.50 2.95	7.00 3.80	Corn, Wheat, Screenings, Grit, Mil- let, Charcoal, Seeds.....	Ingredients as guaranteed.
143		Blue Label Scratch Feed.....	Claimed Found	9.00 10.06	3.00 2.72	7.00 3.79	Corn, Wheat, Barley, Kaffir, Sun- flower Millet, Screenings, Seeds, Charcoal, Grit.....	Ingredients as guaranteed.
182	GWINN MILLING COMPANY, THE, COLUMBUS, OHIO.	Gwinn's Chick Feed.....	Claimed Found	11.40 12.69	4.00 3.16	4.30 4.61	Cracked Corn and Wheat Screenings	Ingredients as guaranteed.
40	HARSHA, P. H., PORTSMOUTH, OHIO.	Peerless Scratch Feed.....	Claimed Found	11.00 11.37	3.00 3.60	4.00 3.35	Corn, Kaffir, Wheat, Buckwheat, Sunflower.....	Ingredients as guaranteed.
294	HAMLIN & COMPANY, DWIGHT E., PITTSBURGH, PA.	H. & S. Alfalfa Feed (For Milch Cows)	Claimed Found	20.00 23.40	4.00 5.35	16.00 13.20	Alfalfa, Cottonseed Meal, Cane Syrup, Dried Grains.....	Ingredients as guaranteed.
411		H. & S. Alfalfa Feed.....	Claimed Found	14.00 15.40	3.50 3.25	16.00 15.45	Alfalfa, Cane Syrup and Dried Grains	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
259	HARDESTY-WILLIAMS MILLING CO., THE, COLUMBUS, OHIO. Corn and Oats Crop.....	Claimed Found	8.00	3.75	8.00	3.00	8.00	3.00	Corn and Oats	Contains oat hulls.
			10.00	3.60	6.15	2.85	6.15	2.85		
126	HARRISON-JOHNSON COMPANY, TOLEDO, OHIO. Anchor Brand Chick Feed.....	Claimed Found	11.00	3.00	3.00	3.00	3.00	3.00	Wheat, Corn, Kaffir, Oats, Millet, Bone, Grit	Ingredients as guaranteed.
			9.63	2.85	2.28	2.85	2.28	2.28		
250	Anchor Brand Scratch Feed.....	Claimed Found	11.00	4.00	3.20	4.00	3.20	3.20	Wheat, Corn, Barley, Oats, Kaffir, Corn, Milo, Maize, Buckwheat, Sunflower, Oil Cake, Limestone Grit	Ingredients as guaranteed.
			10.15	2.90	3.85	2.90	3.85	3.85		
257	HAUCK BREWING COMPANY, THE JOHN, CINCINNATI, OHIO. Malt Sprouts.....	Claimed Found	24.00	2.00	13.00	2.00	13.00	13.00	Barley Sprouts	Ingredients as guaranteed.
			24.35	1.85	10.50	1.85	10.50	10.50		
158	HIRST & GEGLEY LINSEED CO., CHICAGO, ILL. Ground Linseed Cake.....	Claimed Found	34.00	8.00	9.00	8.00	9.00	9.00	From Flaxseed.....	Ingredients as guaranteed.
			33.25	8.79	8.53	8.79	8.53	8.53		
77	HOTTELET & COMPANY, MILWAUKEE, WIS. Hecter Dried Distillers' Grains.....	Claimed Found	30.00	10.00	14.00	10.00	14.00	14.00	Distillers' Grains.....	Ingredients as guaranteed.
			29.74	11.86	13.64	11.86	13.64	13.64		
371	Dried Beet Pulp.....	Claimed Found	8.00	0.50	20.00	0.50	20.00	20.00	Residue of Sugar Beets, dried after extraction of sugar.....	Ingredients as guaranteed.
			8.60	0.70	20.05	0.70	20.05	20.05		

349	HOME CEREAL MILL COMPANY, COLUMBUS, OHIO.	Scratch Feed.....	Claimed Pound	9.00 9.40	2.50 2.70	5.00 6.00	Wheat, Cr. Corn, Kaffir Corn, Bar- ley, Oats, Sunflower, not over 1% Coal.....	Contains marble grit
350	HUBINGER BROS. CO., J. C., KEOKUK, IOWA.	K. K. K. Gluten Feed.....	Claimed Pound	23.50 26.00	2.40 4.70	7.50 6.40	From Corn.....	Ingredients as guaranteed.
351	HULSHIZER MILLING CO., THE, NEWARK, OHIO.	Chop Feed.....	Claimed Pound	10.50 10.15	5.00 3.95	10.00 3.30	Corn, Oats Rye, Corn Bran, Wheat Screenings, Shorts, Corn Meal.....	Little wheat; oats hull mostly.
352	HUMPHREYS-GOODWIN COMPANY, MEMPHIS, TENN.	Dixie Brand Cotton Seed Meal.....	Claimed Pound	38.62 42.87	6.00 8.45	12.00 9.56	From Pressed Cottonseed.....	Ingredients as guaranteed.
353	HUNTER & COMPANY, O. L., CHICAGO, ILL.	Calumet Hominy Feed.....	Claimed Pound	8.50 11.60	7.60 9.70	10.00 5.00	Corn Product.....	Ingredients as guaranteed.
354	HUSTON MANUFACTURING CO., THE, ALLIANCE, OHIO.	Chick Feed.....	Claimed Pound	7.00 10.40	2.00 2.20	10.00 2.20	Corn, Barley, Kaffir Corn, Buck- wheat, Wheat, Shells, Oat Screen- ings.....	High percentage quarts grit.
355	HUTTON, ALIAS, FRANKFORT, OHIO.	Fresh Ground Mill Feed.....	Claimed Pound	15.51 15.65	4.08 4.05	6.00 5.60	Bran, Middlings, Wheat Screenings, Corn Bran, Corn Screenings, Small Wheat.....	Ingredients as guaranteed.
356	ILLINOIS FEED MILLS, ST. LOUIS, MO.	Feed-Well Scratch Feed.....	Claimed Pound	10.00 11.25	3.60 3.75	6.00 2.85	Wheat, Corn, Oats, Barley, Kaffir, Milo Meal, Sunflower, Grits, Re- cleaned Miscellaneous Seeds.....	Ingredients as guaranteed.
357	ILLINOIS SEED COMPANY, THE, CHICAGO, ILL.	Monitor Brand Chick Feed.....	Claimed Pound	10.00 11.75	2.30 3.00	5.00 1.80	Wheat, Corn, Oats, Millet, Kaffir Corn, Crushed Shells and Grit.....	Ingredients as guaran teed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
416	ILLINOIS SEED COMPANY, THE, CHICAGO, ILL.—Concluded. Phoenix Brand Poultry Feed..... IMPERIAL COTTO MILLING COMPANY, PEORIA, ILL.	Claimed Found	10.00 11.85	2.50 2.65	5.00 2.05	Wheat, Barley, Oats, Kaffir Corn, Buckwheat, Corn, Millet, Sunflower, Oil Cake, Shell and Grit.....	Quartz grit.			
12	Imperial Cotto Brand Choice Cotton Seed Meal.....	Claimed Found	41.00 41.12	9.00 9.37	9.00 5.75	Cottonseed Meal.....	Ingredients as guaranteed.			
389	Imperial Cotto Linseed Meal..... IMPERIAL GRAIN & MILLING CO., THE, TOLEDO, OHIO.	Claimed Found	32.00 33.85	7.00 9.60	8.00 7.55	Old Process Linseed Meal.....	Ingredients as guaranteed.			
108	Premium Chop.....	Claimed Found	8.00 8.51	3.50 3.12	13.00 12.61	Shelled and Ear Corn, Cottonseed Meal, Hominy Meal, Oat Midds., Oat Bran, Oat Hulls Salt.....	Ingredients as guaranteed.			
112	Corn, Oats and Barley Chop.....	Claimed Found	8.50 9.63	3.70 3.85	11.75 10.44	Shelled and Ear Corn, Oats, Barley, Flour, Oat Middings, Oat Bran, Oat Hulls.....	Ingredients as guaranteed.			
190	Regal Stock Feed..... INDIANA MILLING COMPANY, TERRE HAUTE, IND.	Claimed Found	8.00 7.30	3.50 2.80	12.75 12.90	Shelled Corn, Ear Corn, Oats, Barley, Wheat, Cottonseed Meal 1% Salt.....	Ingredients as guaranteed.			
184	Sterling Feed..... INTERNATIONAL SUGAR FEED COMPANY, MINNEAPOLIS, MINN.	Claimed Found	9.80 10.50	2.75 3.38	14.00 14.72	Wheat, Bran, Ground Corn, Cob Meal.....	Ingredients as guaranteed.			
1	International Hog Feed and Charcoal.....	Claimed Found	18.00 20.55	3.50 5.02	12.00 14.85	Oil Meal Tankage, Molasses, Screenings, Salt, Oat Clips, Charcoal.....	Sand, 2.50%; ingredients as guaranteed.			

199	International Poultry Feed—Scratch Size	Claimed Pound	10.07 12.35	3.50 2.40	5.00 2.20	Wheat, Oats, Barley, Corn, Sun- flower Kafir Corn	Ingredients as guaranteed.
373	International Cattle Feed	Claimed Pound	25.00 23.70	5.00 7.15	10.00 3.50	Cottonseed Meal, Lined Oil Meal, Cleaned Grain Screenings, Oat Clips, Molasses, Salt	Ingredients as guaranteed.
377	International Dairy Feed	Claimed Pound	18.50 20.70	3.50 4.15	12.00 9.55	Cottonseed Meal, Molasses, Cleaned Grain Screenings, Oat Clips and Salt	Ingredients as guaranteed.
378	International Special Molasses Feed	Claimed Pound	12.50 13.15	3.50 4.35	12.00 10.80	Cottonseed Meal, Molasses, Cleaned Grain Screenings, Oat Clips and Salt	Ingredients as guaranteed.
421	International Horse Feed JACOBS, LOFF, POMEROY, OHIO.	Claimed Pound	12.50 16.35	3.50 3.60	12.00 9.75	Oats, Barley, Oil Meal, Corn, Mo- lasses, Alfalfa, Salt, Cleaned Grain Screenings	Ingredients as guaranteed.
48	Corn and Oats Chop JENKINS & COMPANY, F. A., NORWALK, OHIO.	Claimed Pound	10.05 10.94	3.77 4.28	2.92 4.14	Corn, Oats, Screenings, Corn Bran	Ingredients as guaranteed.
152	Dry Mash	Claimed Pound	20.50 21.88	3.20 4.76	10.05 8.25	Bran, Gluten, Middlings, Beef, Scraps Alfalfa	Ingredients as guaranteed.
171	JOHNSON, L. H., SPRINGFIELD, OHIO. Johnson's Corn and Oats Mixture	Claimed Pound	9.90 10.06	5.40 4.97	9.00 4.80	Corn, Oats, Corn Bran, and Corn Siftings	Ingredients as guaranteed.
283	Johnson's Scratch Feed	Claimed Pound	10.94 10.95	3.23 2.85	7.05 3.15	Kafir Corn, Oats, Peas, Sunflower, Charcoal, Wheat, Corn, Buck- wheat, Barley	Ingredients as guaranteed.
284	Johnson's Chick Feed	Claimed Pound	11.00 11.45	3.50 5.10	7.00 3.05	Cut Oats, Millet, Cut Corn, Char- coal	Ingredients as guaranteed.
399	JORDAN, A. M., CLEVELAND, OHIO. W. & J. Alfalfa Stock Food	Claimed Pound	14.00 16.85	4.00 2.70	12.70 16.05	Alfalfa Meal, Corn, Molasses, Salt	Ingredients as guaranteed.
113	KAY, J. B., SALEM, OHIO. Mixed Feed	Claimed Pound	7.00 10.06	2.50 3.53	10.00 4.58	Wheat, Corn, Popcorn, Rye, Buck- wheat, Barley, Oats, Kafir, Millet Sunflower	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed	Chemist's Findings.
			Per Cent.	Found	Per Cent.	Found	Per Cent.	Found		
33	KEEVER STARCH COMPANY, THE, COLUMBUS, OHIO. Keever Gluten Feed.....	Claimed Pound	22.00 21.00		4.50 4.54		7.00 6.50		Corn Product.....	Ingredients as guaranteed.
410	KELLER, GEORGE, NEWPORT, KY. Distillers' Dried Grain.....	Claimed Pound	30.00 24.75		10.00 7.55		13.00 10.45		Distillers' Dried Grains.....	Ingredients as guaranteed.
57	KELLY COMPANY, THE, CLEVELAND, OHIO. Mixed Grains and Seeds for Chickens.....	Claimed Pound	9.00 13.56		2.50 4.96		10.00 5.18		Corn, Millet, Flax Grains and Seed Screenings.....	Sand, 1.69%; ingredients as guaranteed.
66	Mixed Grains and Seeds for Hens.....	Claimed Pound	9.00 11.81		2.50 3.75		10.00 3.26		Corn, Grains and Seed Screenings, Sunflower.....	Ingredients as guaranteed.
340	KEMPER MILL & ELEVATOR CO., KANSAS CITY MO. Diamond "K" Bran.....	Claimed Pound	14.50 15.50		4.00 4.50		10.00 8.60		Wheat Bran.....	13.5% weed seeds.
163	KEYNES BROTHERS, LOGAN, OHIO. Chop.....	Claimed Pound	10.75 10.94		4.50 3.25		4.50 3.70		Shelled Corn, Oats, Wheat Screenings Corn Bran.....	Ingredients as guaranteed.
236	KINDELL & COMPANY J. B., COVINGTON, OHIO. Chop Feed.....	Claimed Pound	7.00 9.65		3.00 3.15		10.00 2.50		Corn Cracked Corn Screenings, Corn Bran, Oats.....	Contains oat hulls.

227	Invincible Poultry Feed.....	Claimed Pound	9.00 10.40	3.00 4.15	6.00 3.45	Corn, Wheat, Barley, Oats, Kaffir Corn, Buckwheat, Sunflower, Oil Cake, Wheat Screenings, Crushed Oyster Shells and Grit.....	Marble grit.
	KINGPALFA MILLS, NEBRASKA CITY, NEB.						
35	Kingalfa Horse Feed.....	Claimed Pound	10.25 11.15	3.25 1.45	12.00 11.10	Alfalfa, Corn, Oats, Molasses.....	Ingredients as guaranteed.
314	Meadow Feed.....	Claimed Pound	12.00 11.90	0.70 0.30	24.00 17.10	Alfalfa Meal, Molasses.....	Ingredients as guaranteed.
	KORNPALFA FEED MILLING CO., KANSAS CITY, MO.						
335	K. C. Straight Alfalfa Molasses Feed.....	Claimed Pound	9.00 10.95	1.00 0.55	25.00 19.25	Ground Alfalfa Meal and Molasses.....	Ingredients as guaranteed.
	KRAUSE MILLING COMPANY, CHAS. A., MILWAUKEE, WIS.						
85	Badger Dairy Feed.....	Claimed Pound	15.00 19.25	2.00 2.30	15.00 11.59	Cottonseed Meal, Corn, Oil Meal, Al- falfa, Grains, Malt Sprouts, Mo- lasses.....	Ingredients as guaranteed.
88	Badger Alfalfa Horse and Mule Feed.....	Claimed Pound	10.00 13.56	2.00 2.55	12.00 12.58	Corn, Oats, Alfalfa, Molasses.....	Ingredients as guaranteed.
308	Badger Evergreen Feed.....	Claimed Pound	10.00 12.95	1.00 0.25	30.00 16.35	Alfalfa and Syrup.....	Ingredients as guaranteed.
309	Badger Hominy Feed.....	Claimed Pound	9.00 12.15	6.00 7.50	5.00 6.00	From White Corn.....	Ingredients as guaranteed.
	LACKMAN BREWING COMPANY, THE HERMAN, CINCINNATI, OHIO.						
265	Malt Sprouts.....	Claimed Pound	18.00 27.15	1.43 1.50	19.00 11.95	Malt Sprouts.....	Ingredients as guaranteed.
	LACLEDE MILLS, ST. LOUIS, MO.						
379	Blue Ball Sugar Feed.....	Claimed Pound	16.00 15.45	3.00 2.55	12.00 12.40	Wheat, Corn, Oats, Barley, Cotton- seed Meal, Salt, Molasses, Ground Grain Screenings.....	Ingredients as guaranteed.
	LARROWE MILLING COMPANY, THE, DETROIT, MICH.						
165	Dried Beet Pulp.....	Claimed Pound	8.00 9.63	0.50 0.49	20.00 20.65	Dried Beet Pulp.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
310	LARROWE MILLING COMPANY, THE, DETROIT, MICH.—Concluded.	Claimed Found	19.00	3.00	14.00	Cottonseed Meal, Gluten Feed Dis-tillers' Dried Grains, Dried Beet Pulp, Wheat Bran, Wheat Mid-lings, 4% Salt	11.95	Ingredients as guaranteed.		
			21.00	4.10	11.95					
20	LAXO CAKE MEAL COMPANY, CHICAGO, ILL.	Claimed Found	25.00	8.00	11.00	Crude Flaxseed, Field Seeds	14.87	Ingredients as guaranteed.		
			26.25	9.10	14.87					
201	LEISY BREWING COMPANY, THE I. CLEVELAND, OHIO.	Claimed Found	20.00	1.50	17.00	Malt Sprouts	13.90	Ingredients as guaranteed.		
			27.70	2.15	13.90					
351	LIVINGSTON SEED COMPANY THE, COLUMBUS, OHIO.	Claimed Found	12.80	3.00	3.60	Wheat Corn, Peas, Oats, Barley, Buckwheat, Kafir Corn, Sun-flower	3.25	Ingredients as guaranteed.		
			11.95	3.00	3.25					
427	True Blue Chick Feed No. 2	Claimed Found	12.60	3.15	3.60	Kafir Corn, Wheat, Corn, Peas and Buckwheat	2.05	Ingredients as guaranteed.		
			11.45	2.95	2.05					
220	LORAIN FLOUR & GRAIN CO., LORAIN, OHIO.	Claimed Found	7.00	2.00	3.00	Wheat, Corn, Kafir. Buckwheat, Sunflower, Charcoal	2.95	Ingredients as guaranteed.		
			10.80	3.45	2.95					
221	Superior Chick Feed	Claimed Found	7.00	2.00	3.00	Wheat, Corn, Kafir Corn, Millet, Charcoal, Seeds	5.40	Ingredients as guaranteed.		
			10.35	2.95	5.40					

232	LOUDENSLAGER, JOS., TIFFIN, OHIO. Chop Feed.....	Claimed Found	9.50 9.90	5.50 5.45	7.60 5.65	Corn, Oats, Corn Bran, Corn Meal, Midlings.....	Contains oat hulls.
145	LOWE, H. A., NEW LEXINGTON, OHIO. Chop.....	Claimed Found	6.00 10.06	2.00 5.03	15.00 3.68	Corn, Oats, Wheat, Rye, Screenings, Corn Bran.....	Ingredients as guaranteed.
204	LYON-GREENLEAF, WAUSEON, OHIO. Wasco Chick Food.....	Claimed Found	11.00 11.55	3.50 3.65	3.50 2.75	Wheat, Miller, Corn, Charcoal.....	Ingredients as guaranteed.
234	Wasco Scratch Grains.....	Claimed Found	11.00 12.05	3.50 3.85	3.50 5.10	Wheat, Corn, Buckwheat, Sunflower, Charcoal.....	Contains cheat seeds.
25	MAJOR COMPANY, GUY G., TOLEDO, O. Old Process Oil Meal.....	Claimed Found	30.00 33.69	5.00 5.47	10.00 10.70	Linseed Meal.....	Ingredients as guaranteed.
21	MANSFIELD PACKING CO., THE, MANSFIELD, OHIO. Tankage.....	Claimed Found	35.00 32.37	12.28 19.08	2.50	Bone, Blood, Offal of Cattle.....	Sand, 2.62%; ingredients as guaranteed.
333	MAYFLOWER MILLS, FT. WAYNE, IND. Old Process Oil Cake Meal.....	Claimed Found	30.00 33.55	8.00 6.55	9.00 8.60	Flaxseed Oil Cake.....	Ingredients as guaranteed.
334	Bon Ton Poultry Feed.....	Claimed Found	10.00 10.35	2.50 2.60	2.50 2.05	Sunflower Seed, Wheat, Corn, Bar- ley, Kafir Corn, Oats, Milo Maize, Charcoal, Grit.....	Marble grit. No sun- flower seed.
150	MEMPHIS COTTON SEED PRODUCTS CO., MEMPHIS, TENN. Selden Brand Cotton Seed Meal.....	Claimed Found	41.00 35.98	6.00 8.55	10.00 11.00	Made from Pressed Cottonseed.....	Contains cottonseed hulls.
7	METZGER SEED & OIL COMPANY, THE, TOLEDO, OHIO. Old Process Oil Meal.....	Claimed Found	30.00 34.12	5.00 6.10	10.00 9.35	Flaxseed Product.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein		Crude Fat		Crude Fiber		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
315	MIAMI MILLING COMPANY, THE, XENIA, OHIO. Miami Chick	Claimed Found	11.00 11.40	4.00 2.50	5.00 1.50	Corn, Wheat, Kafir Corn, Millet.....				Ingredients as guaranteed.
316	Miami Scratch..... MIDLAND LINSEED PRODUCTS CO., MINNEAPOLIS, MINN.	Claimed Found	11.50 11.40	4.00 3.25	6.50 2.65	Corn, Wheat, Kafir Corn, Barley, Buckwheat and Refined Miscellaneous Seeds.....				Ingredients as guaranteed.
111	Midland Brand Pure Old Process Ground Linseed Cake..... MILLER & NEAL, WARREN, OHIO.	Claimed Found	32.00 32.31	6.00 6.55	8.50 9.27	From Flaxseed.....				Ingredients as guaranteed.
75	Maltine Dairy Feed	Claimed Found	26.00 29.31	4.00 4.77	13.00 10.76	Malt Sprouts, Dist. Grains, Malt Sugar Grain, Cottonseed Meal, Molasses, Salt				Ingredients as guaranteed.
384	MILWAUKEE STOCK FEED COMPANY, MILWAUKEE, WIS. Blue Ribbon Poultry Feed	Claimed Found	10.00 12.25	2.50 2.85	5.00 2.65	Wheat, Corn, Kafir Corn, Barley, Oats, Buckwheat, Sunflower Seed, 3% Grit, 1% Oyster Shells, 1% Charcoal.....				Ingredients as guaranteed.
385	Pedigree Poultry Feed.....	Claimed Found	10.00 13.20	2.50 2.65	5.00 2.40	Wheat, Corn, Kafir, Barley, Oats, Buckwheat, Sunflower, Charcoal				Ingredients as guaranteed.
298	MORRIS & COMPANY, CHICAGO, ILL. Big Brand 60% Digester Tankage.....	Claimed Found	60.00 60.05	8.00 10.45	5.00 3.40	Meat Scraps.....				Ingredients as guaranteed.
370	Big Brand 40% Digester Tankage.....	Claimed Found	40.00 54.10	8.00 9.85	5.00 2.65	Meat Scraps.....				Ingredients as guaranteed.

311	MOTT & COMPANY, D., PARIS, OHIO. Fresh Ground Chop.....	Claimed Found	7.00 11.55	2.50 4.15	10.00 5.05	Oats, Corn, Corn Bran and Corn Flour.....	Contains oat hulls.
186	McCULLOUGH, J. CHARLES, CINCINNATI, OHIO. Acme Chick.....	Claimed Found	10.00 11.51	3.00 4.95	11.00 10.51	Millet, Cracked Corn, Wheat, Buck- wheat, Kafir Corn, Cane Seed, Grain Screenings; not over 10% Grit.....	Ingredients as guaranteed.
167	"Bell" Grain and Seed and Screenings..... NATIONAL FEED COMPANY, ST. LOUIS, MO.	Claimed Found	10.00 10.94	3.00 4.56	11.00 9.14	Corn, Wheat, Oats Barley, Rye, Buckwheat, Kafir Corn, Millet, Screenings, Clover Seed; not over 10% Grit.....	Ingredients as guaranteed.
276	Pure Hominy Feed (Kiln Dried).....	Claimed Found	8.50 10.75	7.00 7.95	10.00 5.00	Made from pure corn.....	Ingredients as guaranteed.
277	Prime Cotton Seed Meal..... NEW LEXINGTON MILLING CO., NEW LEXINGTON, OHIO.	Claimed Found	41.00 41.00	7.50 8.35	14.00 9.45	Cottonseed Meal.....	Ingredients as guaranteed.
179	Mill Feed.....	Claimed Found	5.00 11.37	3.00 3.32	25.00 6.40	Ground Corn and Cob Screenings, Wheat Bran, and Products of Flour and Feed Mills.....	Ingredients as guaranteed.
134	Mixed Feed..... NEWPORT MILLING COMPANY, NEWPORT, OHIO.	Claimed Found	10.00 10.94	3.50 3.54	5.00 3.87	Wheat Screenings, Shelled Corn Corn Bran.....	Ingredients as guaranteed.
22	Economy Scratch.....	Claimed Found	10.75 10.50	3.15 3.44	5.00 2.95	Wheat, Corn, Kafir, Buckwheat, Sunflower.....	Ingredients as guaranteed.
23	Economy Scratch with Grit.....	Claimed Found	10.75 11.81	3.15 3.41	5.00 3.02	Wheat, Corn, Kafir, Barley, Buck- wheat, Charcoal, Grit.....	Ingredients as guaranteed.
27	Acme Chop Feed.....	Claimed Found	9.63 10.94	4.37 3.87	7.80 10.29	Corn Meal, Oats, Barley Hulls.....	Ingredients as guaranteed.
31	Imperial Scratch.....	Claimed Found	10.75 13.13	3.15 2.90	5.00 2.89	Wheat, Corn Kafir, Buckwheat, Sunflower, Barley, Oil Cake.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber		Ingredients Guaranteed.	Chemist's Findings.	
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.			
NICKEL PLATE ELEVATOR COMPANY, THE, CLEVELAND, OHIO.—Concluded.											
120	Acme Mash.....	Claimed Found	18.56 15.75	4.77 4.27	7.70 5.54	Beef Scraps, Hen-ske, Oil Meal, Alfalfa, Guten Meal, Barley, Bran.....					Insoluble mineral matter, 7.28%; ingredients as guaranteed.
146	Economy Chick.....	Claimed Found	10.75 10.50	3.15 2.41	5.00 2.32	Wheat, Oat Meal, Corn, Millet, Kaffir					Ingredients as guaranteed.
176	Imperial Chick.....	Claimed Found	10.75 11.37	5.15 2.39	5.00 2.37	Cut Wheat, Oat Meal, Cracked Corn, Millet Seed, Cracked Kaffir Corn..					Ingredients as guaranteed.
295	Economy Digester Tankage.....	Claimed Found	60.00 61.10	8.00 10.85	0.90	Meat Product.....					Ingredients as guaranteed.
296	Economy Beef Scraps.....	Claimed Found	50.00 54.50	6.00 8.80	2.45	Meat Product.....					Ingredients as guaranteed.
400	Imperial Growing Feed.....	Claimed Found	10.75 12.20	3.15 1.30	5.00 5.30	Corn, Wheat, Kaffir, Millet Seed, Hulled Oats.....					Ingredients as guaranteed.
NICKEL PLATE MILLING COMPANY, THE, PAINESVILLE, OHIO.											
271	Chippewa Distillers' Grains.....	Claimed Found	30.00 32.55	10.00 10.75	12.00 9.55	From Corn, Barley, Malt and Rye.....					Ingredients as guaranteed.
272	Nickel Plate Scratch Feed.....	Claimed Found	10.00 11.35	3.00 2.80	5.00 3.15	Wheat, Oats, Corn, Kaffir Corn, Barley, Buckwheat, Sunflower.....					Ingredients as guaranteed.
273	Nickel Plate Homony.....	Claimed Found	10.25 10.50	6.00 8.75	6.00 3.65	From Corn.....					Ingredients as guaranteed.
341	Malt Sugar Grains.....	Claimed Found	35.00 29.45	8.00 4.95	10.00 9.10	Malt Grains and Granulated Sugar.....					Contains no granulated sugar.

196	NORTHERN, W. C., LITTLE ROCK, ARK. Bee Brand Cotton Seed Meal	Claimed Found	41.00 41.55	7.00 8.00	10.50 7.40	Cottonseed Meal	Ingredients as guaranteed.
409	NORTHERN ILLINOIS CEREAL CO., LOCKPORT, ILL. Gold Medal Poultry Food	Claimed Found	12.00 9.85	3.50 1.80	2.50 1.55	Buckwheat, Wheat, Corn, Barley, Sunflower, Kafir Corn	Contains marble grit.
414	Peru C and O Feed	Claimed Found	8.50 8.50	3.50 3.55	10.30 8.60	Corn, Oat Middlings, Oat Shorts, Oat Hulls	Ingredients as guaranteed.
318	NORTHWESTERN ELEVATOR & MILL CO., MT. VERNON, OHIO. Dried Beet Pulp	Claimed Found	8.00 9.60	4.50 0.95	20.00 18.65	Dried Beet Pulp	Ingredients as guaranteed.
319	Corn and Oats Chop	Claimed Found	10.70 10.60	4.30 3.00	9.00 3.95	Corn, Oats and Corn Offal	Ingredients as guaranteed.
357	NORTH-WEST MILLS COMPANY, WINONA, MINN. Sugarota Dairy Feed	Claimed Found	16.50 20.40	3.50 5.95	12.00 11.35	Cottonseed Meal, Malt Sprouts, Mixed Broken Grain, Molasses, small % Salt	Ingredientd as guaranteed.
358	Sugarota Horse Feed	Claimed Found	12.00 12.80	3.00 3.05	14.00 12.50	Ground Oats, Barley, Corn, Molasses, small % Salt	Ingredients as guaranteed.
359	Sugarota Milk Meal	Claimed Found	25.00 21.55	6.00 4.85	9.00 7.80	Wheat Bran, Wheat Middlings, Malt Sprouts, Cottonseed Meal, small % Salt	Ingredients as guaranteed.
360	Sugarota Calf Meal	Claimed Found	25.00 24.60	6.00 4.65	6.00 3.10	Pulverized Malt Flour, Wheat Flour, Cotton Seed Meal, Linseed Meal	Ingredients as guaranteed.
107	OATEQUAL COMPANY, THE, COLUMBUS, OHIO. Alcorn	Claimed Found	10.00 12.25	3.00 3.52	14.00 10.46	Oats, Corn, Alfalfa, Brewers' Grains, Oat Middlings, Oat Shorts, Oat Hulls, Molasses	Ingredients as guaranteed.
274	Oatequal Scratch Feed	Claimed Found	11.00 10.85	4.00 3.55	3.20 2.06	Wheat, Corn, Barley, Oats, Kafir Corn Milo, Buckwheat, Sunflower, Oil Cake, Limestone Grit	Ingredients as guaranteed.
275	Caramel Feed	Claimed Found	10.00 11.15	4.00 3.90	9.00 8.50	Corn, Oats, Molasses	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.	
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.			
OMAHA ALFALFA MILLING CO., OMAHA, NEB.											
248	Perfection Horse Feed.....	Claimed Found	10.50 11.70	2.00 2.45	12.00 11.55	Cracked Corn, Oats, Alfalfa Meal, Syrup.....					Ingredients as guaranteed.
233	Chop Feed..... O'ROARK, J. A. & W. L., COVINGTON, OHIO.	Claimed Found	5.00 10.90	2.00 4.50	10.00 4.45	Corn, Oats, Corn Bran					Ingredients as guaranteed.
342	Bartlett's Malt Sugar Grains..... PAINESVILLE ELEVATOR COMPANY, THE, PAINESVILLE, OHIO.	Claimed Found	25.00 30.65	5.00 6.05	15.00 12.20	Brewers' Grains.....					Ingredients as guaranteed.
94	Red Ribbon Chick Feed..... PARK & POLLARD COMPANY, THE BOSTON, MASS.	Claimed Found	10.00 10.94	3.50 3.53	5.00 2.72	Corn, Wheat, Rice, Oats, Millet.....					Ingredients as guaranteed.
116	Dry Mash.....	Claimed Found	20.00 17.94	3.00 4.55	10.00 10.77	Bran, Middlings, Corn, Wheat, Barley, Alfalfa, Fish, Meat, Bone, Salt					Ingredients as guaranteed.
124	Grainless—Chick Feed.....	Claimed Found	10.00 16.18	2.77 3.50	5.00 3.55	Corn, Wheat, Rice, Millet, Seeds, Fish.....					Ingredients as guaranteed.
161	Scratch Feed (Screened).....	Claimed Found	10.00 10.16	2.50 3.51	5.00 2.35	Corn, Wheat, Buckwheat, Oats, Barley, Sunflower, Charcoal.....					Ingredients as guaranteed.
162	Growing Feed.....	Claimed Found	10.00 14.00	3.50 3.15	5.00 2.27	Bran, Middl., Corn, Wheat, Barley, Alfalfa, Fish, Bone, Salt.....					Ingredients as guaranteed.
238	Intermediate Chick Feed.....	Claimed Found	10.00 12.25	3.50 3.65	5.00 2.60	Kaffir Corn, Wheat, Barley, Oats, Millet, Rice.....					Ingredients as guaranteed.

252	Fattening Feed..... PEE PEE MILLING COMPANY, WAVERLY, OHIO.	Claimed Pound	10.00 9.55	3.50 3.00	3.00 4.15	Oats, Corn, Wheat, Barley.....	Ingredients as guaranteed.
200	Mixed Feed..... PERIN BROS., CINCINNATI, OHIO.	Claimed Pound	12.00 16.30	4.00 3.45	9.00 7.65	Wheat Bran, Wheat Middlings, Corn Bran, Corn Meal.....	Ingredients as guaranteed.
101	Hominy Feed..... PETERS MILL COMPANY, M. C. OMAHA, NEB.	Claimed Pound	10.70 10.06	7.80 7.15	3.20 3.05	Corn Product.....	Ingredients as guaranteed.
89	Peters' June Pasture Dairy Meal..... Peters' Arab Horse Feed.....	Claimed Pound	10.00 14.87	0.50 1.34	26.00 19.83	Alfalfa, Molasses.....	Ingredients as guaranteed.
239	Peters' Alfalfa Sugar Meal..... Peters' Lucern Alfalfa Meal.....	Claimed Pound	9.00 11.10	2.00 2.80	15.00 10.80	Cracked Corn, Oats, Alfalfa, Mo- lasses.....	Ingredients as guaranteed.
282	.....	Claimed Pound	10.00 18.75	0.50 0.70	26.00 15.60	Alfalfa and Molasses.....	Ingredients as guaranteed.
305	..... PHOENIX MILL COMPANY, THE, MARIETTA, OHIO.	Claimed Pound	12.00 16.25	0.50 2.65	33.00 28.05	Alfalfa.....	Ingredients as guaranteed.
115	Corn and Wheat Bran..... PIEL BROS. STARCH COMPANY, INDIANAPOLIS, IND.	Claimed Pound	14.00 15.31	4.25 3.55	10.00 10.47	Corn Bran, Wheat Bran.....	Ingredients as guaranteed.
240	P. B. R. O. Gluten Feed..... PIONEER CEREAL COMPANY, THE, AKRON, OHIO.	Claimed Pound	21.00 24.80	2.00 2.60	8.00 6.95	From Corn.....	Ingredients as guaranteed.
24	Pioneer Stock Feed..... Corn and Oats Chop.....	Claimed Pound	10.00 10.94	3.50 4.78	10.00 11.38	Corn, Barley, Oat Middlings, Oat Shorts.....	Ingredients as guaranteed.
29	.....	Claimed Pound	10.00 8.75	4.00 3.75	10.00 12.63	Corn, Oat Middlings, Oat Hulls.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.	Crude Fat.	Crude Fiber.	Ingredients Guaranteed	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.		
	PIONEER CEREAL COMPANY, THE, AKRON, OHIO—Concluded.						
62	Yellow Hominy Feed.....	Claimed Found	10.00 9.63	7.00 5.05	9.00 2.44	Corn Product.....	Ingredients as guaranteed.
306	Pioneer Scratch Feed.....	Claimed Found	10.94 11.95	2.60 2.85	8.50 2.10	Corn, Kaffir Corn Oats, Barley, Wheat Buckwheat, Sunflower Seed.	Ingredients as guaranteed.
415	Crown Scratch Feed.....	Claimed Found	10.94 19.65	2.60 1.25	8.50 4.00	Corn, Oil Cake, Kaffir Corn, Barley, Buckwheat, Sunflower, Grit.....	Ingredients as guaranteed.
	PIQUA MALT COMPANY, THE, PIQUA, OHIO.						
173	Malt Sprouts.....	Claimed Found	24.06 22.31	1.57 1.66	13.25 13.68	Kiln Dried Rootlets of Malted Grain.	Ingredients as guaranteed.
	POPE TIN PLATE COMPANY, STEBENVILLE, OHIO.						
192	Dairy and Hog Feed.....	Claimed Found	18.28 16.70	8.95 8.60	4.82 6.25	Wheat Middlings and Pure Palm Oil.....	Ingredients as guaranteed.
	PRATT FOOD COMPANY, CHICAGO, ILL.						
269	Pratt's Baby Chick Food.....	Claimed Found	13.00 13.00	4.75 3.00	3.00 1.15	Millet, Ginger, Rape, Caraway, Shell Meal, Hulled Oats, Corn Meal, Wheat Middlings, Epsom Salts, Bone Meal, Cooked Wheat Pepper, Gentian.....	Ingredients as guaranteed.
	QUAKER OATS COMPANY, THE, CHICAGO, ILL.						
4	White Diamond Feed.....	Claimed Found	8.00 10.06	3.25 3.90	9.00 7.63	Corn, Oat Middlings, Oat Hulls, Oat Shorts.....	Ingredients as guaranteed
5	Quaker Molasses Dairy Feed.....	Claimed Found	16.00 17.94	3.50 4.18	14.00 17.10	Molasses, Malt Sprouts, Cottonseed Meal, Flax Plant, Oat Middlings, Hulls and Shorts.....	Ingredients as guaranteed

6	Blue Ribbon Dairy Feed.....	Claimed Found	25.00 22.31	4.00 4.82	9.00 13.30	Molasses, Wheat Bran, Malt Sprouts, Hominy Feed, Cottonseed Meal, Oat Middlings, Hulls, Shorts	Ingredients as guaranteed.
19	Yellow Hominy Feed.....	Claimed Found	9.00 12.25	4.00 7.10	4.00 3.83	Corn Product.....	Ingredients as guaranteed.
51	Schumacher Scratching Grains.....	Claimed Found	10.00 11.81	2.50 3.59	5.00 3.18	Wheat, Kafir, Barley, Corn, Buck- wheat, Sunflower, Charcoal.....	Ingredients as guaranteed.
52	Victor Feed.....	Claimed Found	8.00 10.06	3.00 4.25	12.00 9.97	Corn, Oat Midds., Oat Hulls, Oat Shorts.....	Ingredients as guaranteed.
53	Boss Feed.....	Claimed Found	8.00 10.06	3.00 4.15	12.00 10.39	Corn, Oat Midds., Oat Hulls, Oat Shorts.....	Ingredients as guaranteed.
54	Daisy Dairy Feed.....	Claimed Found	16.00 18.38	4.00 4.78	16.00 16.08	Molasses, Screenings, Flax Plant, Oat Midds., Oat Hulls, Oat Shorts, Cottonseed Meal.....	Ingredients as guaranteed.
55	Schumacher Calf Meal.....	Claimed Found	19.00 19.69	8.00 7.46	3.00 2.61	Oat Meal, Wheat Meal, Flaxseed, Dried Casein.....	Ingredients as guaranteed.
68	American Hen Scratching Grains.....	Claimed Found	10.00 11.37	2.50 4.32	5.00 2.55	Wheat, Kafir, Barley, Corn Buck- wheat, Sunflower, Charcoal, Marble Shells.....	Ingredients as guaranteed.
72	Excelsior Feed.....	Claimed Found	8.00 10.06	3.00 4.23	12.00 9.70	Corn, Oat Midds., Oat Hulls, Oat Shorts.....	Ingredients as guaranteed.
74	Schumacher Little Chick Feed.....	Claimed Found	10.00 12.69	2.50 3.86	5.00 2.40	Wheat, Kafir, Corn, Millet, Corn, Oat Groats, Pigeon Grass, Charcoal, Grit.....	Ingredients as guaranteed.
86	Schumacher Stock Feed.....	Claimed Found	10.00 12.69	3.25 3.94	10.00 9.45	Corn, Barley, Wheat Flour, Oat Midds., Oat Hulls, Oat Shorts, Cottonseed Meal, Salt.....	Ingredients as guaranteed.
104	C. O. & B. Feed.....	Claimed Found	10.00 10.50	3.25 4.01	10.00 9.15	Corn, Barley, Wheat Flour, Oat Midds., Oat Shorts, Oat Hulls, Cottonseed Meal, Salt.....	Ingredients as guaranteed.
122	Sterling Stock Feed.....	Claimed Found	10.00 9.63	3.25 3.83	10.00 11.68	Corn, Barley, Wheat Flour, Oat Midds., Oat Hulls, Oat Shorts, Salt, Cottonseed Meal.....	Ingredients as guaranteed.
123	Daisy Hen Feed.....	Claimed Found	10.00 10.94	2.50 4.39	5.00 3.55	Wheat, Kafir, Corn, Buckwheat, Sun- flower, Charcoal, Grit.....	Ingredients as guaranteed.
129	Schumacher Special Horse Feed.....	Claimed Found	9.25 9.63	3.25 4.11	8.00 8.43	Corn, Oats, Oat Midds., Oat Hulls, Oat Shorts, Salt.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
QUAKER OATS COMPANY, THE, CHICAGO, ILL.—Concluded.										
144	Buckeye Mixed Feed	Claimed Found	13.00 15.31	4.00 4.87	8.00 11.59	Wheat Bran, Wheat Middlings, Ground Wheat.....	Ingredients as guaranteed.			
183	Mother's Feed (Hen Size)	Claimed Found	11.00 12.69	3.50 4.32	2.50 2.96	Wheat, Kaffir Corn, Oat Groats, Cracked Indian Corn, Buckwheat, Sunflower, Oil Cake, Charcoal	Ingredients as guaranteed.			
198	Gregson's Calf Meal.....	Claimed Found	25.00 24.25	5.00 5.85	5.00 6.60	Oat Meal, Barley Meal, Linseed Meal, Cottonseed Meal, three-fourths of 1% Salt.....	Ingredients as guaranteed.			
205	Green Cross Horse Feed	Claimed Found	10.00 11.25	3.25 2.70	10.00 12.40	Alfalfa, Corn, Oats, Cotton Seed Meal, Oat Middlings, Oat Hulls.....	Ingredients as guaranteed.			
217	Mother's Feed (Chick Size)	Claimed Found	10.50 12.15	3.00 3.65	2.50 2.80	Oatmeal, Wheat, Millet, Kaffir Corn, Indian Corn, Ground Charcoal.....	Ingredients as guaranteed.			
230	Quaker Chick Feed	Claimed Found	10.00 11.85	2.50 3.30	5.00 2.55	Wheat, Kaffir Corn, Millet, Cracked Corn, Oat Groats, Pigeon Grass, Charcoal, Marble Grit.....	Ingredients as guaranteed.			
231	Sterling Chick Feed	Claimed Found	10.00 11.45	2.50 3.00	5.00 3.95	Wheat, Kaffir Corn, Millet, Cracked Corn, Oat Groats, Pigeon Grass, Charcoal, Marble Grit.....	Ingredients as guaranteed.			
301	Sterling Scratch Feed	Claimed Found	10.00 11.85	2.50 3.00	5.00 2.00	Wheat, Kaffir Corn, Barley, Corn, Buckwheat, Sunflower Seed, Char- coal.....	Ingredients as guaranteed.			
336	Ground Puffed Wheat	Claimed Found	15.00 14.00	2.50 1.65	1.50 2.50	Ground Puffed Wheat	Ingredients as guaranteed.			
420	Purity Hen Feed	Claimed Found	10.00 11.16	2.50 3.75	5.00 2.30	Wheat, Kaffir Corn, Barley, Corn, Buckwheat, Sunflower, Charcoal	Ingredients as guaranteed.			

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
339	RIDGWAY & SON, FRANK, NEW PHILADELPHIA, OHIO. Ridgway's Scratch Feed	Claimed Found	10.00 10.85	3.00 3.75	5.00 1.85	Wheat, Corn, Barley, Kaffir Corn, Buckwheat, Sunflower.....			Ingredients as guaranteed.	
212	RICHMOND DALE MILLING CO., RICHMOND DALE, OHIO. Scioto Valley Mixed Chop.....	Claimed Found	8.10 8.70	3.00 3.30	10.00 7.20	Ear Corn, Wheat Screenings, Oats and Corn Bran.....			Ingredients as guaranteed.	
426	RINCK, CHAS. A., WEST ALEXANDRIA, OHIO. Sugarcote Dairy Feed.....	Claimed Found	10.00 15.60	2.50 5.50	18.00 7.55	Cottonseed Meal, Malt Sprouts, Corn, Wheat, Barley, Spelt, Molasses, Salt.....			Ingredients as guaranteed.	
413	ROBERTS COTTON OIL CO., CAIRO, ILL. Diamond "R" Cotton Seed Meal.....	Claimed Found	41.00 41.80	7.00 8.75	10.00 8.00	Cotton Seed Meal.....			Ingredients as guaranteed.	
110	ROBINSON-DANFORTH COMPANY, ST. LOUIS, MO. Winner Mill Feed—Scratch Size.....	Claimed Found	10.00 9.93	3.60 3.93	6.00 2.85	Wheat, Corn, Oats, Barley, Kaffir, Milo Maize, Grits, Sunflower, Seeds.....			Ingredients as guaranteed.	
153	Winner Mill Feed—Chick Size..... SATTERTHWAIT COMPANY, W. D., SALEM, OHIO.	Claimed Found	10.00 10.94	3.60 3.94	6.00 2.80	Wheat, Corn, Millet, Kaffir, Milo Maize, Seeds, Grit.....			Ingredients as guaranteed.	
91	Balanced Ration Dairy Feed.....	Claimed Found	19.90 20.12	5.61 5.50	6.71 8.26	Oil Meal, Cottonseed Meal, Gluten, Corn and Oat Chop, Hominy Feed, Bran, Salt.....			Ingredients as guaranteed.	

270	A-H Horse and Mule Feed	Claimed Pound	9.50 14.10	4.00 1.95	9.50 8.05	Oats, Corn, Bran and Molasses	Ingredients as guaranteed.
337	Honey Suckle Calf Meal	Claimed Pound	24.80 29.15	6.50 4.75	5.40 6.30	Wheat Flour, Coconut Meal, Locust Bean, Pea Meal, Bean Meal, Flax- seed Meal, Dried Blood, Dry Milk Powder	Ingredients as guaranteed.
267	SCHAFFNER BROTHERS CO., ERIE, PA. Blood Meal	Claimed Pound	40.00 43.15	18.00 13.25	1.35	Ground Dried Blood, Mixed With Cooked Meat	Contains 5.70% sand.
292	SCHLITZ BREWING COMPANY, JOS., MILWAUKEE, WIS. Schlitz Purity Dried Grains	Claimed Pound	24.00 23.00	6.00 5.15	16.00 17.25	Malted and Unmalted Cereals	Ingredients as guaranteed.
44	SCIOTOVILLE MILLING CO., THE, SCIOTOVILLE, OHIO. Mixed Feed	Claimed Pound	10.00 13.56	3.00 5.08	11.00 9.43	Wheat Bran, Corn Bran, Screenings	Ingredients as guaranteed.
155	SEBALD GRAIN COMPANY, MIDDLETOWN, OHIO. Chop	Claimed Pound	7.50 10.06	2.00 5.11	12.00 4.42	Oats, Corn, Corn Bran	Ingredients as guaranteed.
109	SEELMEYER-FOX GRAIN COMPANY, THE, CINCINNATI, OHIO. Our Own Scratch Feed	Claimed Pound	11.01 10.06	3.49 3.59	7.05 3.42	Corn, Wheat, Kaffir, Barley, Sun- flower, Buckwheat	Ingredients as guaranteed.
253	Our Own Chop Feed	Claimed Pound	7.00 10.00	4.92 4.25	16.27 6.35	Oat Cleanings and Corn Product	Ingredients as guaranteed.
26	SHEETS BROTHERS ELEVATOR CO., THE, CLEVELAND, OHIO. S. B. Horse and Mule Feed	Claimed Pound	9.50 15.31	2.75 4.00	9.00 5.94	Oats, Corn Bran, Molasses	Ingredients as guaranteed.
185	SHEPARD COMPANY, THE O. C., MEDINA, OHIO. Shepard's Chick Food	Claimed Pound	10.50 10.91	3.50 3.01	3.00 3.42	Ground White and Yellow Corn, Wheat, Kaffir Corn, Millet, Char- coal and Marble Grit	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Found	Per Cent.	Found	Per Cent.	Found		
140	SHEPARD, CLARK & COMPANY, CLEVELAND, OHIO.	Claimed Found	41.00 35.44	7.00 7.61	10.00 12.67	Decorticated Cottonseed	Contains cottonseed hulls.			
286	Euclid Hominy Feed	Claimed Found	8.50 10.45	7.00 6.70	7.00 4.65	From Corn	Ingredients as guaranteed.			
18	SHERWIN-WILLIAMS COMPANY, THE, CLEVELAND, OHIO.	Claimed Found	33.00 35.00	6.00 10.03	8.00 9.23	Linseed Meal	Ingredients as guaranteed.			
157	SLOVER FERTILIZER COMPANY, THE EDW., CAMDEN, OHIO.	Claimed Found	40.00 36.74	10.00 9.54	2.00 3.50	Pork Packers' Pure Tankage	Sand, 3.94%; ingredients as guaranteed.			
87	SMITH CALF MEAL COMPANY, THE, EATON RAPIDS, MICH.	Claimed Found	23.00 26.25	4.00 3.53	5.00 5.40	Flaxseed Meal, Cottonseed Meal, Blood Flour, Wheat, Corn, Malt, Sugar	Ingredients as guaranteed.			
345	SOHNEN MALT COMPANY, THE EDWARD, HAMILTON, OHIO.	Claimed Found	24.50 25.40	1.30 1.25	12.70 12.10	From Barley	Ingredients as guaranteed.			
266	SPRATT'S PATENT (AMERICAN) LIMITED, NEWARK, N. J.	Claimed Found	20.00 20.65	3.50 2.80	2.00 1.00	Wheat Flour and Meat	Ingredients as guaranteed.			
	Chick Meal No. 5									

302	STALEY MANUFACTURING CO., A. E., DECATUR, ILL.	Staley's Gluten Feed.....	Claimed Pound	23.00 25.25	2.50 4.40	12.00 6.40	Gluten Meal, Corn Bran and residue resulting from evaporation of steep water.....	Ingredients as guaranteed.
15	STANDARD CEREAL COMPANY, THE., CHILLICOTHE, OHIO.	"Standco" Hominy Feed.....	Claimed Pound	10.00 12.25	7.00 7.97	4.00 2.95	Corn Product.....	Ingredients as guaranteed.
69	STAR MILL COMPANY, RACINE, OHIO.	Chop Feed.....	Claimed Pound	10.50 12.69	4.00 4.26	5.00 5.25	Oats, Corn, Screenings, Corn Bran.....	Ingredients as guaranteed.
290	SUFFERN, HUNT & COMPANY, DECATUR, ILL.	"Acme" Hominy Feed.....	Claimed Pound	9.30 11.20	7.10 7.95	10.00 4.30	Corn Product.....	Ingredients as guaranteed.
78	SUGARINE COMPANY, THE, CHICAGO, ILL.	Sugarine Dairy Feed.....	Claimed Pound	16.50 17.94	3.50 4.42	12.00 13.25	Cottonseed Meal, Gluten Feed, Screenings, Oat Clippings.....	Ingredients as guaranteed.
128		Suco Hen Feed.....	Claimed Pound	10.00 12.25	3.00 3.60	5.00 3.92	Corn, Wheat, Barley, Kaffir, Oil Cake, Sunflower, Buckwheat.....	Ingredients as guaranteed.
147		Suco Cotton Seed Meal.....	Claimed Pound	41.00 39.37	8.00 10.24	10.00 8.51	Cottonseed Meal.....	Ingredients as guaranteed.
417		Sugarine Alfalfa Horse Feed.....	Claimed Pound	11.00 35.25	2.50 3.30	12.00 13.15	Corn, Oats, Barley, Cottonseed Meal, Alfalfa, Molasses, one-half of 1% Salt, Reclaimed Grain Screenings.....	No Oats or Barley.
419		Suco Dairy Feed.....	Claimed Pound	18.00 16.35	3.00 2.95	10.00 7.75	Gluten Feed, Cottonseed Meal, Oat Clippings, Molasses, Ground and Boiled Grain Screenings, one-half of 1% Salt.....	Ingredients as guaranteed.
425		Sugarine Horse Feed.....	Claimed Pound	10.00 12.45	2.50 3.00	12.00 9.05	Corn, Cottonseed Meal, Molasses, Ground and Boiled Grain Screen- ings, one-half of 1% Salt.....	Ingredients as guaranteed.
8	TENNESSEE FIBER COMPANY, MEMPHIS, TENN.	Creamo Brand Cotton Seed Feed Meal.....	Claimed Pound	20.00 24.06	5.00 5.36	22.00 21.52	Cottonseed Meal, Cottonseed Hulls.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Continued.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.		Crude Fat.		Crude Fiber.		Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.		
367	TOLEDO ELEVATOR COMPANY, THE, INDIANAPOLIS, IND.	Claimed Found	7.00	5.50	12.50	Hominy Feed, Ground Corn Cob, one-half of 1% Salt.....	9.50	9.40		Ingredients as guaranteed.
				6.25						
76	TOLEDO GRAIN & MILLING COMPANY, THE, TOLEDO, OHIO.	Claimed Found	7.00	3.50	9.00	Corn, Oat Middlings, Oat Groats, Oat Hulls.....	9.19	7.15		Ingredients as guaranteed.
				3.95						
132	Camp's C. O. & B. Chop Feed.....	Claimed Found	7.00	3.50	8.00	Corn, Oats, Barley, Oat Middlings, Oat Groats, Oat Hulls.....	8.75	5.30		Ingredients as guaranteed.
				3.73						
133	Camp's Little Wonder Chop Feed.....	Claimed Found	7.00	3.00	9.00	Corn, Oats, Oat Middlings, Oat Groats, Oat Hulls.....	8.75	6.00		Ingredients as guaranteed.
				3.96						
243	Camp's No. 1 Yellow Chop Feed.....	Claimed Found	7.00	3.50	8.00	Yellow Corn, Oats, Oat Middlings, Oat Groats, Oat Hulls.....	8.40	3.85		Ingredients as guaranteed.
				3.70						
244	Camp's No. 2 White Middlings.....	Claimed Found	12.00	4.00	6.00	Wheat and Fine White Corn Meal.....	14.05	4.15		Ingredients as guaranteed.
				4.35						
245	Camp's Wamba Feed.....	Claimed Found	10.00	3.50	8.00	Corn and Wheat Bran.....	10.50	4.50		Ingredients as guaranteed.
				3.80						
320	TURNER BROTHERS COMPANY, THE, BREMEN, OHIO.	Claimed Found	10.00	4.50	6.00	Corn, Oats, Corn Bran, German Meal and Screenings.....	10.55	3.20		Ingredients as guaranteed.
				4.20						
75	TUSCARAWAS CEREAL MILLS, TUSCARAWAS, OHIO.	Claimed Found	7.00	4.00	11.00	Ear Corn, Oats, Corn Bran and Screenings.....	9.50	8.95		Ingredients as guaranteed.
				2.95						

291	UNION GRAIN & HAY COMPANY, THE, CINCINNATI, OHIO.	"Union Chop".....	Claimed Pound	9.25 10.15	3.49 3.25	8.40 3.70	Corn, Bran, Middlings, Oat Clip- pings.....	Very little bran.
313	UNIONVILLE MILLING COMPANY, UNIONVILLE, OHIO.	Morgan's Scratch Feed No. 2.....	Claimed Pound	9.00 11.95	2.50 3.30	5.00 3.85	Corn, Kaffir Corn, Wheat, Buck- wheat, Sunflower, Oats, Grit, Hen-e-ta.....	Ingredients as guaranteed.
121	UNITED STATES SUGAR FEED COM- PANY, MILWAUKEE, WIS.	U. S. Sugar Feed.....	Claimed Pound	15.00 15.31	3.00 3.76	12.00 13.45	Cottonseed Meal, Wheat, Corn, Oats, Malt Sprouts, Screenings, Alfalfa, Molasses.....	Ingredients as guaranteed.
406	WADSWORTH FEED COMPANY, THE, WARREN, OHIO., ..	Superior Dairy Feed.....	Claimed Pound	18.00 21.80	4.00 2.45	10.00 9.70	Malt Sprouts, Corn Meal, Alfalfa, Meal, Oil Meal, Cottonseed Meal, Distillers' Dried Grains, Bran, Gluten, Salt, Molasses.....	Ingredients as guaranteed.
64	WADE & SONS, JOHN, MEMPHIS, TENN.	"Eclipse"—High Grade Cotton Seed Meal.....	Claimed Pound	41.00 38.37	7.50 7.19	10.00 9.98	From Decorticated Cottonseed.....	Ingredients as guaranteed.
327	WAGNER SONS BREWING COMPANY, THE JOHN, SIDNEY, OHIO.	Barley Sprouts.....	Claimed Pound	25.00 27.20	1.00 2.15	14.00 10.95	From Barley.....	Ingredients as guaranteed.
279	WAGONER MILLING COMPANY, THE, TOLEDO, OHIO.	Wagoner's Chop.....	Claimed Pound	10.00 10.20	5.00 5.40	4.00 4.85	Corn, Oats, Corn Bran and Meal.....	Ingredients as guaranteed.
178	WASH CO ALFALFA M. F. & MILLING CO., THE. FT. CALHOUN, NEB.	Wash-Co Alfalfa Horse Feed.....	Claimed Pound	10.00 11.37	2.00 2.93	12.00 9.40	Alfalfa Meal, Corn, Oats, Molasses, Salt.....	Ingredients as guaranteed.

TABULATED ANALYSES OF FEED STUFFS—Concluded.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found.	Crude Protein.	Crude Fat	Crude Fiber.	Ingredients Guaranteed.	Chemist's Findings.
			Per Cent.	Per Cent.	Per Cent.		
WEIDLER COMPANY, THE SAM W., CINCINNATI, OHIO.							
96	Snow King Germ Food.....	Claimed Found	12.25 11.81	7.70 6.98	7.35 5.40	Corn, Barley.....	Ingredients as guaranteed.
102	Snow King Hominy Feed.....	Claimed Found	10.06 10.50	7.89 6.82	4.35 3.09	Corn Product.....	Ingredients as guaranteed.
289	Snow King Chop.....	Claimed Found	11.81 10.45	8.93 6.75	4.82 5.30	Corn Hearts and Oats.....	Ingredients as guaranteed.
WEISS ALFALFA STOCK FOOD COMPANY, THE OTTO, WICHITA, KAN.							
202	The Otto Weiss Alfalfa Stock Food.....	Claimed Found	11.00 12.50	3.50 3.20	14.00 14.15	Alfalfa, Corn Chop, Bran and Shorts.	Ingredients as guaranteed.
329	Otto Weiss Alfalfa Molasses Feed No. 1.....	Claimed Found	10.00 13.75	2.00 1.20	20.00 20.55	Alfalfa and Molasses.....	Ingredients as guaranteed.
346	Pure Dustless Alfalfa (Meal).....	Claimed Found	14.00 14.20	1.50 1.65	30.00 30.55	Alfalfa Hay.....	High in Stems.
374	Otto Weiss Sweet Feed No. 4.....	Claimed Found	10.00 12.95	2.00 3.45	15.00 15.30	Cane Molasses, Alfalfa, Cracked Corn, Oats.....	Ingredients as guaranteed.
WEISHEIMER BROTHERS, COLUMBUS, OHIO.							
213	Weisheimer's Chop Feed.....	Claimed Found	8.00 10.60	3.75 5.50	8.00 4.25	Corn, Oats, Corn Bran.....	Ingredients as guaranteed.
WESS GRAIN & COAL COMPANY, THE B. H., CINCINNATI, OHIO.							
312	I. X. L. Scratch.....	Claimed Found	10.00 11.40	2.50 3.15	4.00 1.50	Corn, Barley, Wheat, Kafir Corn, Sunflower.....	Contains no barley.

50	WESTERN GRAIN PRODUCT COMPANY, HAMMOND, IND.	"Hammond Dairy Feed".....	Claimed Pound	16.50 18.38	3.50 5.21	11.00 11.37	Cottonseed Meal, Dist. Grains, Malt Sprouts, Corn, Oats, Barley, Mo- lasses.....	Sand, 2.40%; ingredients as guaranteed.
199	"Chicago Alfalfa Horse and Mule Feed".....	WHEELERSBURG MILLING COMPANY, THE, WHEELERSBURG, OHIO.	Claimed Pound	10.00 12.25	3.00 2.81	15.00 13.42	Corn, Oats, Alfalfa, Linseed Meal, Molasses.....	Ingredients as guaranteed.
38	Mill Feed.....	WUICHT FERTILIZER COMPANY, THE, DAYTON, OHIO.	Claimed Pound	10.00 13.13	3.50 5.57	11.50 4.19	Wheat, Corn.....	Ingredients as guaranteed.
106	Ground Beef Scrap.....	Stock Tankage.....	Claimed Pound	50.00 56.43	10.00 13.17	1.00	Cracklings or Pork and Beef Scraps.	Ingredients as guaranteed.
215			Claimed Pound	40.00 43.85	10.00 11.55	5.00 3.35	Animal Tankage.....	Ingredients as guaranteed.

DANGER.**STOP! LOOK! LISTEN!**

The following brands of feed stuffs are found to be two per cent or more below guarantee in crude protein or crude fat or two per cent or more above guarantee in crude fiber.

All samples have been retested and results confirmed.

Record Number	Name and Address of Person, Firm or Corporation and Name of Feed Stuffs.	Claimed and Found	Crude Protein.	Crude Fat.	Crude Fiber.
			Per Cent.	Per Cent.	Per Cent.
	ARMOUR FERTILIZER WORKS, CHICAGO, ILL.				
328	Meat Meal	Claimed Found	60.00 62.20	10.00 8.20	1.50 4.75
	BALTIC MILLS, J. & S. EMISON & CO., VINCENNES, IND.				
398	Hominy Feed	Claimed Found	9.18 9.90	9.10 6.95	5.60 3.75
	BARTLETT CO., J. E., JACKSON, MICH.				
317	Farmer Brand Cotton Seed Meal.....	Claimed Found	41.00 37.55	7.00 8.70	10.00 9.70
	BARWELL, J. W., WAUKEGAN, ILL.				
16	Blachford's Calf Meal	Claimed Found	25.00 26.00	5.00 4.57	5.00 7.23
67	Blachford's Milk Mash for Poultry.....	Claimed Found	18.00 23.62	6.50 4.31	6.00 6.60
170	Blachford's Sugar and Flaxseed.....	Claimed Found	27.00 21.88	10.00 9.57	5.75 3.39
	BUNCH COMMISSION CO., T. H., LITTLE ROCK, ARK.				
401	Old Gold Cotton Seed Meal.....	Claimed Found	41.00 37.75	9.00 7.85	9.00 8.70
	CLEVELAND & SANDUSKY BREWING CO., THE, SANDUSKY, OHIO.				
11	Dried Brewer's Grain	Claimed Found	22.00 26.25	1.25 7.51	11.50 17.59
	CORN PRODUCTS REFINING CO., NEW YORK, N. Y.				
45	Diamond Hog Meal	Claimed Found	18.00 15.75	8.00 21.27	13.00 10.56
	DAYTON GRAIN & HAY CO., THE DAYTON, OHIO.				
323	Alfalfa Chop Feed	Claimed Found	10.50 12.65	4.25 4.55	5.50 9.10
	EARLY & DANIEL CO., THE CINCINNATI, OHIO.				
262	Cerealia Chop	Claimed Found	13.00 14.00	5.00 4.15	9.00 12.25
287	Alfalfa Cerealia	Claimed Found	23.00 23.20	5.05 5.60	10.00 12.70

STOP! LOOK! LISTEN! —Continued.

Record Number	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found	Crude Protein.	Crude Fat.	Crude Fiber.
			Per Cent.	Per Cent.	Per Cent.
	FOLSOM, E. M., CLEVELAND, OHIO.				
395	Folsom's No. 2 Chop.....	Claimed Found	9.63 11.65	4.80 0.95	4.15 5.10
	FULLER, O. A., CONNEAUT, OHIO.				
364	Fuller's Mixed Feed	Claimed Found	10.00 29.40	2.00 6.15	12.00 16.35
	GATES ELEVATOR COMPANY, THE, CLEVELAND, OHIO.				
361	"Quality" Growing Feed	Claimed Found	11.50 12.05	4.00 1.30	4.00 2.10
	GOLDCAMP MILL COMPANY, THE, IRONTON, OHIO.				
73	Bran	Claimed Found	14.00 13.13	4.00 4.36	10.00 12.86
	GOEKE & COMPANY, F. W., ST. LOUIS, MO.				
392	Atlas Dairy Feed	Claimed Found	20.00 14.35	4.00 4.20	12.00 9.40
	INTERNATIONAL SUGAR FEED CO., MINNEAPOLIS, MINN.				
1	International Hog Feed and Charcoal.....	Claimed Found	18.00 20.56	3.50 5.02	12.00 14.85
	JORDAN, A. M., CLEVELAND, OHIO.				
399	W. & J. Alfalfa Stock Food.....	Claimed Found	14.00 16.85	4.00 2.70	12.70 16.05
	KELLER, GEORGE, NEWPORT, KY.				
410	Distillers' Dried Grains.....	Claimed Found	30.00 24.75	10.00 7.55	13.00 10.45
	LAXO CAKE MEAL CO., CHICAGO, ILL.				
20	Old Process Laxo Cake Meal.....	Claimed Found	25.00 26.25	8.00 9.10	11.00 14.87
	LORAIN FLOUR & GRAIN CO., LORAIN, OHIO.				
221	Superior Chick Feed	Claimed Found	7.00 10.35	2.00 2.95	3.00 5.40
	MANSFIELD PACKING CO., THE MANSFIELD, OHIO.				
21	Tankage	Claimed Found	35.00 32.37	12.28 19.08	2.50
	MEMPHIS COTTON SEED PRODUCTS CO., MEMPHIS, TENN.				
150	Selden Brand Cotton Seed Meal.....	Claimed Found	41.00 35.88	6.00 8.55	10.00 11.00
	NICKEL PLATE MILLING CO., THE PAINESVILLE, OHIO.				
341	Malt Sugar Grains	Claimed Found	35.00 29.45	8.00 4.95	10.00 9.10

STOP! LOOK! LISTEN!—Continued.

Record Number	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found	Crude Protein	Crude Fat.	Crude Fiber.
			Per Cent	Per Cent	Per Cent.
NICKEL PLATE ELEVATOR COMPANY, THE, CLEVELAND, OHIO.					
27	Arme Chop Feed	Claimed Found	9.63 10.94	4.37 3.87	7.80 10.29
129	Arme Mash	Claimed Found	18.56 15.75	4.77 4.27	7.70 5.54
296	Economy Beef Scraps	Claimed Found	50.00 54.50	6.00 8.80	..... 2.45
NORTHERN ILLINOIS CEREAL CO., LOCKPORT, ILL.					
409	Gold Medal Poultry Feed.....	Claimed Found	12.00 9.85	3.50 1.80	2.50 1.55
NORTH-WEST MILL COMPANY, WINONA, MINN.					
359	Sugarota Milk Meal.....	Claimed Found	25.00 21.55	5.00 4.85	9.00 7.80
PARK & POLLARD CO., THE, BOSTON, MASS.					
116	Dry Mash	Claimed Found	20.00 17.94	3.00 4.55	10.00 10.77
PIONEER CEREAL COMPANY, THE, AKRON, OHIO.					
29	Corn and Oats Chop.....	Claimed Found	10.00 8.75	4.00 3.75	10.00 12.63
QUAKER OATS COMPANY, THE, CHICAGO, ILL.					
5	Quaker Molasses Dairy Feed.....	Claimed Found	16.00 17.94	3.50 4.18	14.00 17.10
6	Blue Ribbon Dairy Feed.....	Claimed Found	25.00 22.51	4.00 4.82	9.00 13.30
144	Buckeye Mixed Feed	Claimed Found	13.00 15.31	4.00 4.87	8.00 11.59
205	Green Cross Horse Feed.....	Claimed Found	10.00 11.25	3.25 2.70	10.00 12.40
RAUH & SONS, E., INDIANAPOLIS, IND.					
160	Rauh's Digester Tankage for Hogs.....	Claimed Found	60.00 55.55	..... 9.29	..........
SATTERTHWAIT CO., W. D., SALEM, O.					
270	A-H Horse and Mule Feed.....	Claimed Found	9.50 14.10	4.00 1.95	9.50 8.05
SCHAFFNER BROTHERS CO., ERIE, PA.					
267	Blood Meal	Claimed Found	40.00 43.15	18.00 13.25	..... 1.35
SHEPARD CLARK & CO., CLEVELAND, OHIO.					
140	"Sun" Brand Cotton Seed Meal.....	Claimed Found	41.00 35.44	7.00 7.61	10.00 12.67

STOP! LOOK! LISTEN!—Concluded.

Record Number.	Name and Address of Person, Firm or Corporation and Name of Feed Stuff.	Claimed and Found	Crude Protein.	Crude Fat.	Crude Fiber.
			Per Cent.	Per Cent.	Per Cent.
	SLOVER FERTILIZER COMPANY, THE EDWARD, CAMDEN, OHIO.				
157	Slovers' Pure Meat Meal.....	Claimed Found	40.00 36.74	10.00 9.54	2.00 3.50
	WEIDLER CO., THE SAM W., CINCINNATI, OHIO.				
289	Snow King Chop	Claimed Found	11.81 10.45	8.93 6.75	4.82 5.95

FINANCIAL STATEMENT OF FEED STUFFS INSPECTION ENDING DECEMBER 31, 1912.

RECEIPTS

License fees received for 466 brands.....	\$11,650 00
Fees for special analyses.....	36 00
Amount paid into State Treasury.....	\$11,686 00

DISBURSEMENTS

Amount paid Chemist for analyses and microscopical examinations	\$3,040 00
Salary and expense of Inspector W. M. Brown.....	688 08
Salary and expense of Inspector M. H. Jenkins.....	542 15
Salary and expense of Inspector Jas. A. Kennedy.....	268 58
Expense of Inspector H. F. Fricke.....	23 88
Expense of Clerk S. K. Johnson.....	36 63
Supplies, etc.....	36 28
	\$4,635 60
Balance in State Treasury to the credit of the Agricultural Fund.....	\$7,050 40

LIST OF FEED STUFFS LICENSED BUT NOT ANALYZED.

LIST OF FEED STUFFS PROPERLY LICENSED

And offered for Sale in Ohio during 1912, but Samples of Which were not Found by the Secretary or his Deputies on the Market, Hence They Have Not Been Analyzed.

MANUFACTURERS' CLAIMS.

	Crude Protein.	Crude Fat.	Crude Fiber.
AMERICAN COTTON OIL CO., THE, NEW YORK, N. Y. Prime Cotton Seed Meal.....	38.61	8.00	11.50
AMERICAN MILLING COMPANY, CHICAGO, ILL. Amco Chick Feed, 5% Grit.....	10.00	3.00	5.00
AMERICAN LINSEED CO., NEW YORK, N. Y., AND CHICAGO, ILL. New Process Linseed Meal.....	36-40	1-3	6-7.½
ARCHER-DANIELS LINSEED CO., MINNEAPOLIS, MINN. Old Process Ground Oil Cake.....	32.00	6.00	10.00
BALTIC MILLS, J. & S. EMISON & CO., VINCENNES, IND. Amo Syrup Feed	10.00	3.00	12.00
BARWELL, J. W., WAUKEGAN, ILL. Blatchford's Calf Meal	24-26	5-6	5-6
BROWNING, J. W., UNRICHSVILLE, OHIO. No. 2 Chop	7.00	4.00	12.00
BUNCH COMMISSION CO., T. H., LITTLE ROCK, ARK. Acme Cotton Seed Meal.....	38.60-43.	7-9	8-12.00
CHAPIN & COMPANY, HAMMOND, IND. Wonder Poultry Feed	9.50	2.50	5.00
CLINTON SUGAR REFINING COMPANY, CLINTON, IOWA. Clinton Gluten Feed	20-25.00	3.00	8.00
DAVIS COMPANY, ZACK, DELAWARE, OHIO. Delaware Scratch Feed	11.00	3.00	3.90
DORSEL COMPANY, THE, NEWPORT, KY. Dorsel's Mixed Bran	14.00	4.00	9.00
EAST ST. LOUIS COTTON OIL COMPANY, CHICAGO, ILL. Choice Cotton Seed Meal.....	41.50-46	7-9	8-10
GARLAND MILLING COMPANY, GREENSBURG, IND. Garland Mixed Feed	16.00	4.00	8.50
HARRISON-JOHNSON CO., TOLEDO, OHIO. Anchor Brand Developing Feed.....	11.00	3.00	3.00
Anchor Brand Pigeon Feed.....	13.00	2.60	3.00
Anchor Brand Chop Feed.....	8-10.00	3.50	5.00
Anchor Brand Corn Feed Meal.....	8.30	2.24	2.50
HORTON MILLING COMPANY, ASHTABULA, OHIO. B & C Cow Feed.....	7.50	2.65	22.50
ILLINOIS FEED MILLS, ST. LOUIS, MO. Star Molasses Feed	11.50	3.20	10.00
Feed-Well Chick Feed	10.00	3.60	6.00
INTERNATIONAL SUGAR FEED COMPANY, MINNEAPOLIS, MINN. International Molasses Feed	10.00	3.50	12.00
LAKE SHORE ELEVATOR CO., THE, CLEVELAND, OHIO. Faramel Horse Feed	10.94	4.25	6.90

LIST OF FEED STUFFS LICENSED BUT NOT ANALYZED—Concluded.

	Crude Protein.	Crude Fat.	Crude Fiber.
LIVINGSTON SEED COMPANY, THE, COLUMBUS, OHIO.			
True Blue Chick Feed.....	10.20	4.40	3.50
LOUISVILLE MILLING & ELEVATOR CO., LOUISVILLE, OHIO.			
Chop	7.00	2.50	8.00
MAYFOWER MILLS, FT. WAYNE, IND.			
Corn and Oats Chop Feed.....	10.00	5.00	6.00
Admiral Chick Food.....	10.00	2.50	2.50
MORGAN, R. F., ASHTABULA, OHIO.			
Green Meadow Dairy Feed.....	11.00	2.00	25.00
MILWAUKEE GRAINS & FEED CO., MILWAUKEE, WIS.			
Crown Brand Dried Brewers' Grains.....	25.00	5.00	15.00
NICKEL PLATE ELEVATOR CO., THE, CLEVELAND, OHIO.			
Economy Chick with Grit.....	10.75	3.15	5.00
OATEQUAL COMPANY, THE, COLUMBUS, OHIO.			
Oatequal	12.00	5.00	12.00
PEEBLES MILLS, THE, PEEBLES, OHIO.			
Mixed Feed	14.00	4.00	8.00
PIONEER CEREAL COMPANY, THE, AKRON, OHIO.			
Golden Egg Scratch	10.94	2.80	8.50
POAGE COMPANY, R. C., ASHLAND, KY.			
Mixed Feed	12.94	4.65	6.05
PFEFFER MILLING CO., LEBANON, ILL.			
Hominy Feed	10.41	9.20	2.20
PURITY MILLING CO., THE, MANHATTAN, KANSAS.			
Sunflower Alfalfa Molasses Feed.....	13.69	0.74	19.94
Sunflower Alfalfa Meal	15.00	1.50	29.51
QUAKER OATS COMPANY, THE, CHICAGO, ILL.			
Quaker Scratching Grains	10.00	2.50	5.00
Purity Chick Feed	10.00	2.50	5.00
American Poultry Food	12.00	3.50	9.00
RALSTON PURINA COMPANY, ST. LOUIS, MO.			
Success Chick Feed	10.00	3.60	6.00
STANDARD TIN PLATE COMPANY, CANNONBURG, PA.			
Refuse Middlings	16.17	8.00	8.50
THOMPSON AND COMPANY, PITTSBURGH, PA.			
Oil Meal	30-37.50	5.50-8.50	6-11
WADE & SONS, JOHN, MEMPHIS, TENN.			
"Saturn" Cotton Seed Meal.....	38.50	7.00	12.00
WADSWORTH FEED CO., THE, WARREN, OHIO.			
Superior Horse Feed	11.00	5.00	10.00
WESTERN GRAIN PRODUCT, COMPANY, HAMMOND, IND.			
Hammond Horse Feed	12.00	2.80	11.00

FEEDING STANDARDS.

By H. A. WEBER, *Chemist*.

PROBLEM OF EXPERIMENT STATIONS.

After the establishment of the German Experiment Stations one of the first problems attacked was the feeding of farm animals. The investigations undertaken in this direction resulted in the establishment of a rational system of feeding which, next to soil fertility, is one of the greatest importance in the whole domain of agriculture.

The time, labor and money spent to secure this desirable end were simply enormous, taken in the aggregate, since they had to embrace the following investigations:

INVESTIGATIONS EMBRACED.

1. The analysis of the whole mass of materials used in feeding.
2. The determination of the digestibility of the nutrients in each separate feeding stuff.
3. The proper amount of feed as well as the proper amounts and proportions of the various nutrients necessary for the greatest and most economical production of growth, flesh, fat, milk, wool and work.
4. Average digestible nutrients and fertilizing constituents in American feedings stuffs.

RESULTS ACCOMPLISHED.

This is not the place to consider in detail how these results were accomplished. The reader must be satisfied with the results, and these are given in brief to meet the demands made upon this Department by feeders, who are anxious to obtain some information in regard to the feeding standards of farm animals.

For this purpose three tables are submitted, which give the data for the preparation of proper rations to answer the requirements of farm animals in the various uses to which they are put; also gives fertilizing constituents.

TABLE I.

Table I is compiled from the most recent reports of experiment stations and manuals of cattle feeding and gives the number of pounds of digestible nutrients in 100 pounds of the respective feeding stuffs.

TABLE II.

Table II is taken bodily from Henry's Feeds and Feeding. As this table is identical with that published in Mentzel & Lengerke's *Landw Kalender*, it no doubt represents the feeding standards of farm animals as determined by experiment up to date.

TABLE III.

Table III gives the digestible nutrients and fertilizing constituents in American feeding stuffs, is taken from Henry's Feed and Feeding, who in turn secured a number of the results from Bulletin 22, Office of Experiment Station, United States Department of Agriculture, and various other sources.

COMPOUNDING A RATION.

As an example for using the tables in compounding a ration, we will take the case of a milch cow giving about 16.6 pounds of milk per day. Suppose the feeder has the following feeding stuffs at command: average timothy hay, oat straw, corn silage and soy beans.

For the following weights of the feeding stuffs the corresponding weights of the digestible nutrients and dry matter are readily obtained from Table I:

	Dry Matter.	Protein.	Carbohydrates.	Fat.	Nutritive Ratio.
10 lbs. hay.....	8.60	.28	4.34	.14	.....
10 lbs. oat straw.....	9.10	.12	3.86	.08	.....
20 lbs. silage.....	4.20	.18	2.70	.04	.....
5 lbs. soy beans.....	4.45	1.45	1.11	.72	.....
45 lbs.	26.35	2.03	12.01	.98	1:6.9
Standard Table II.....	27.00	2.00	11.00	.40	1:6.0

The ration thus compounded is a little high in fat, which also makes the nutritive ratio a little wider than the standard. But on the whole it may be considered near enough for all practical purposes.

Hence 10 pounds of hay, 10 pounds of oat straw, 20 pounds of corn silage and 5 pounds of soy beans make a suitable ration per 1,000 pounds live weight per day.

NUTRITIVE RATIO.

The nutritive ratio is found by dividing the sum of the digestible carbohydrates plus 2.4 times the digestible fat by the digestible protein.

TABLE I.

Average number of Pounds of Dry Matter and Digestible Nutrients in 100 Pounds of Principal Feeding Stuffs, With the Nutritive Ratio.

	Dry Matter.	Protein.	Fat.	Carbo-hydrates.	Nutritive Ratio.
Hay.					
	Lbs.	Lbs.	Lbs.	Lbs.	
Timothy, general average.....	86.	2.8	1.4	43.4	1:16.7
Timothy, cut in bloom.....	85.	3.4	1.7	43.6	1:14
Orchard grass	90.	4.9	1.4	42.3	1: 9.3
Red top	91.	4.8	1.0	46.9	1:10.2
Kentucky blue grass	79.	4.8	2.0	37.3	1: 8.7
Hungarian grass (millet).....	92.	4.5	1.3	51.7	1:12.1
Oat hay	91.	4.3	1.5	46.4	1:11.6
Soy bean hay	80.	10.8	1.5	38.7	1: 3.9
Red clover, poor.....	85.	5.7	1.0	37.9	1: 7.1
Red clover, medium.....	84.	7.0	1.2	38.1	1: 5.9
Red clover, good.....	83.	8.5	1.7	38.2	1: 5.
Red clover, excellent.....	83.	10.7	2.1	37.6	1: 4.
Crimson clover	90.	10.5	1.2	34.9	1: 3.5
Alfalfa, medium	84.	9.4	1.0	28.3	1: 3.2
Alfalfa, good	84.	12.3	1.0	31.4	1: 2.7
Cowpea	89.	10.8	1.1	38.6	1: 3.8
Straw.					
Wheat	90.	0.4	0.4	36.3	1:33.1
Rye	93.	0.6	0.4	40.6	1:39.1
Oat	91.	1.2	0.8	38.6	1:33.7
Barley	86.	0.7	0.6	41.2	1:60.9
Soy bean	90.	2.3	1.0	40.0	1:18.4
Pea-vine	86.	4.3	0.8	32.3	1: 7.9
Red clover	84.	4.2	1.0	28.5	1: 7.4
Corn stover	60.	1.7	0.7	32.4	1:28.9
Buckwheat	90.	2.0	0.7	37.7	1:19.7
Wheat chaff	86.	0.3	0.5	23.3	1:85.0
Oat chaff	86.	1.5	0.7	33.0	1:23.1
Green Fodder.					
Fodder corn	21.	1.0	0.4	11.6	1:12.5
Pasture grass	20.	2.5	0.5	10.2	1: 4.5
Kentucky blue grass.....	35.	3.0	0.8	19.8	1: 7.2
Timothy	38.	1.2	0.6	19.1	1:17.1
Orchard grass in bloom.....	27.	1.5	0.5	11.4	1: 8.4
Red top in bloom.....	35.	2.1	0.6	21.2	1:10.7
Oat fodder	38.	2.6	1.0	18.9	1: 8.1
Rye fodder	23.	2.1	0.4	14.1	1: 7.1
Sorghum	21.	0.6	0.4	12.2	1:21.9
Hungarian grass	29.	2.0	0.4	16.0	1: 8.4
Barley fodder	21.	1.9	0.4	10.2	1: 5.8
Red clover	29.	2.9	0.7	14.8	1: 5.6
Crimson clover	19.	2.4	0.5	9.1	1: 4.2
Alfalfa	28.	3.9	0.5	12.7	1: 3.5
Cowpea	16.	1.8	0.2	8.7	1: 5.1
Soy bean	25.	3.2	0.5	11.0	1: 3.8
Silage.					
Corn	21.	0.9	0.7	11.3	1:14.4
Clover	28.	2.0	1.0	13.5	1: 7.9
Sorghum	24.	0.6	0.2	14.9	1:22.3
Alfalfa	28.	3.0	1.0	8.5	1: 4.3
Grass	32.	1.9	1.6	13.4	1: 9.0
Cowpea	21.	1.5	0.9	8.6	1: 7.1
Soy bean	26.	2.7	1.3	8.7	1:16.8
Roots and Tubers.					
Potato	21.	0.9	0.1	16.3	1:18.3
Sugar beet	14.	1.1	0.1	10.2	1: 9.4
Mangold	9.	1.1	0.1	5.4	1: 5.1
Turnip	9.	1.0	0.2	7.2	1: 7.6
Carrot	11.	0.8	0.2	7.8	1:10.3
Artichoke	20.	2.0	0.2	16.8	1: 8.6

TABLE I—Concluded.

	Dry Matter.	Protein.	Fat.	Carbo- hydrates.	Nutritive Ratio.
Grains.					
	Lbs.	Lbs.	Lbs.	Lbs.	
Dent corn	89.	7.8	4.3	66.7	1: 9.8
Flint corn	89.	8.0	4.3	66.2	1: 9.5
Sweet corn	91.	8.8	7.0	63.7	1: 9.1
Wheat	90.	10.2	1.7	69.2	1: 7.1
Rye	88.	9.9	1.1	67.6	1: 7.0
Barley	89.	8.7	1.6	65.6	1: 7.9
Oats	89.	9.2	4.2	47.3	1: 6.2
Rice	88.	4.8	0.3	72.2	1:15.1
Buckwheat	87.	7.7	1.8	49.2	1: 6.9
Seeds.					
Sorghum	87.	7.0	3.1	52.1	1: 8.5
Broom corn	86.	7.4	2.9	48.3	1: 7.8
Kaffir corn	85.	7.8	2.7	57.1	1: 8.1
Millet	86.	8.9	3.2	45.0	1: 5.8
Flax	91.	20.6	29.0	17.1	1: 3.7
Cotton	90.	12.5	17.3	30.0	1: 5.6
Sunflower	93.	12.1	29.0	20.8	1: 7.4
Soy bean	89.	29.6	14.4	22.3	1: 1.9
Cowpea	85.	18.3	1.1	54.2	1: 3.1
Mill Products.					
Spring wheat bran	89.	12.9	3.4	40.1	1: 3.7
Winter wheat bran	88.	12.3	2.6	37.1	1: 3.5
Wheat shorts	88.	12.2	3.8	50.0	1: 4.8
Wheat middlings	88.	12.8	3.4	53.0	1: 4.7
Wheat screenings	88.	9.8	2.2	51.0	1: 5.7
Rye bran	88.	11.5	2.0	50.3	1: 4.7
Rye shorts	91.	11.9	1.6	45.1	1: 4.1
Oat meal	92.	11.5	5.9	52.1	1: 5.7
Oat shorts	92.	12.5	2.8	46.9	1: 4.2
Rice bran	90.	5.3	7.3	45.1	1:11.8
Rice polish	90.	9.0	6.5	56.4	1: 8.0
Buckwheat bran	90.	7.4	1.9	30.4	1: 4.7
Buckwheat shorts	89.	21.1	5.5	33.5	1: 2.2
Buckwheat middlings	87.	22.0	5.4	33.4	1: 2.1
Corn bran	91.	7.4	4.6	59.8	1: 9.5
Dairy Products.					
Cow's milk	12.8	3.6	3.7	4.9	1: 3.8
Skim milk, gravity	9.6	3.1	0.8	4.7	1: 2.1
Skim milk, centrifugal	9.4	2.9	0.3	5.2	1: 2.0
Buttermilk	9.9	3.9	1.1	4.0	1: 1.7
Whey	6.6	0.8	0.3	4.7	1:67.0
Industrial By-Products.					
Linseed meal, old process	91.	29.3	7.0	32.7	1: 1.7
Linseed meal, new process	90.	28.2	2.8	40.1	1: 1.6
Cotton-seed meal	92.	37.2	12.2	16.9	1: 1.2
Cocoonut meal	90.	15.6	10.5	38.3	1: 4.0
Palm-nut meal	90.	16.0	9.0	52.6	1: 4.6
Sunflower seed cake	92.	31.2	12.8	19.6	1: 1.6
Peanut meal	89.	42.0	6.9	22.8	1: 0.9
Gluten meal	92.	25.8	11.0	43.3	1: 2.7
Starch refuse	92.	11.4	6.5	58.4	1: 6.4
Malt sprouts	90.	18.6	1.7	37.1	1: 2.2
Brewers' grains, dried	92.	15.7	5.1	36.3	1: 3.0
Dried blood	91.	52.0	2.5	0.0	1: 0.1
Meat scrap	89.	66.0	13.7	0.3	1: 0.5
Waste Products.					
Oat hulls	90.	1.3	0.6	40.1	1:31.8
Buckwheat hulls	87.	2.1	0.6	27.9	1:13.9
Cotton-seed hulls	89.	0.3	1.7	33.1	1:123.9
Corn cob	89.	0.4	0.3	52.5	1:133.

TABLE II.

FEEDING STANDARDS FOR FARM ANIMALS.

Pounds of Dry Matter and Digestible Nutrients Per Day Per 1,000 Pounds Live Weight Together With Nutritive Ratio.

Animal.	Dry Matter.	Protein.	Fat.	Carbo-hydrates.	Nutritive Ratio.
	Lbs.	Lbs.	Lbs.	Lbs.	
1. Oxen.					
At rest in stall.....	18	0.7	8.0	0.1	1:11.8
At light work.....	22	1.4	10.0	0.3	1:7.7
At medium work.....	25	2.0	11.5	0.5	1:6.5
At heavy work.....	28	2.8	13.0	0.8	1:5.3
2. Fattening cattle.					
First period.....	30	2.5	15.0	0.5	1:6.5
Second period.....	30	3.0	14.5	0.7	1:5.4
Third period.....	26	2.7	15.0	0.7	1:6.2
3. Milch cows.					
When yielding daily—					
11.0 pounds of milk.....	25	1.6	10.0	0.3	1:6.7
16.6 pounds of milk.....	27	2.0	11.0	0.4	1:6.0
22.0 pounds of milk.....	29	2.5	13.0	0.5	1:5.7
27.5 pounds of milk.....	32	3.3	13.0	0.8	1:4.5
4. Sheep.					
Coarse wool.....	20	1.2	10.5	0.2	1:9.1
Fine wool.....	23	1.5	12.0	0.3	1:8.5
5. Breeding ewes.					
With lambs.....	25	2.9	15.0	0.5	1:5.6
6. Fattening sheep.					
First period.....	30	3.0	15.0	0.5	1:5.4
Second period.....	22	3.5	14.5	0.6	1:4.5
7. Horses					
Light work.....	20	1.5	9.5	0.4	1:7.0
Medium work.....	24	2.0	11.0	0.6	1:6.2
Heavy work.....	26	2.5	13.3	0.8	1:6.0
8. Brood sows.....	22	2.5	15.5	0.4	1:6.6
9. Fattening swine.					
First period.....	36	4.5	25.0	0.7	1:5.9
Second period.....	32	4.0	24.0	0.5	1:6.3
Third period.....	25	2.7	18.0	0.4	1:7.0
10. Growing cattle.					
Dairy Breeds.					
Age in Ave. live wt. months. per head lbs.					
2-3 150.....	23	4.0	13.0	2.0	1:4.5
3-6 300.....	24	3.0	12.8	1.0	1:5.1
6-12 500.....	27	2.0	12.5	0.5	1:9.8
12-18 700.....	26	1.8	12.5	0.4	1:7.5
18-24 900.....	26	1.5	12.0	0.3	1:8.5
11. Growing cattle.					
Beef Breeds.					
2-3 160.....	23	4.2	13.0	2.0	1:4.2
3-6 330.....	24	3.5	12.8	1.5	1:4.7
6-12 550.....	25	2.5	13.2	0.7	1:6.0
12-18 750.....	24	2.0	12.5	0.5	1:6.8
18-24 950.....	24	1.8	12.0	0.4	1:7.2

TABLE II—Concluded.

Animal.		Dry Matter.	Protein.	Fat.	Carbo- hydrates.	Nutritive Ratio.
12. Growing sheep.						
Wool Breeds.						
Age in months.	Ave. live wt. per head lbs.	Lbs.	Lbs.	Lbs.	Lbs.	
4-6	60.....	25	3.4	15.4	0.7	1: 5.0
6-8	75.....	25	2.8	13.8	0.6	1: 5.4
8-11	80.....	23	2.1	11.5	0.5	1: 6.0
11-15	90.....	22	1.8	11.2	0.4	1: 7.0
15-20	100.....	22	1.5	10.8	0.3	1: 7.7
13. Growing sheep.						
Mutton Breeds.						
4-6	60.....	26	4.4	15.5	0.9	1: 4.0
6-8	80.....	26	3.5	15.0	0.7	1: 4.8
8-11	100.....	24	3.0	14.3	0.5	1: 5.2
11-15	120.....	23	2.2	12.6	0.5	1: 6.3
15-20	150.....	22	2.0	12.0	0.4	1: 6.5
14. Growing Swine.*						
Breeding Stock.						
2-3	50.....	44	7.6	28.0	1.0	1: 4.0
3-5	100.....	35	5.0	23.1	0.8	1: 5.0
5-6	120.....	32	3.7	21.3	0.4	1: 6.0
6-8	200.....	28	2.8	18.7	0.3	1: 7.0
8-12	250.....	25	2.1	15.3	0.2	1: 7.5
15. Growing, fattening swine.						
2-3	50.....	44	7.6	28.0	1.0	1: 4.0
3-5	100.....	35	5.0	23.1	0.8	1: 5.0
5-6	150.....	33	4.3	22.3	0.6	1: 5.5
6-8	200.....	30	3.6	20.5	0.4	1: 6.0
9-12	300.....	26	3.0	18.3	0.3	1: 6.4

TABLE III.

AVERAGE DIGESTIBLE NUTRIENTS AND FERTILIZING CONSTITUENTS IN AMERICAN FEEDING STUFFS.

The following table for the digestible nutrients and fertilizing constituents are taken from Henry's Feeds and Feeding, who in turn secured a number of the results from Bulletin 22, Office of Experiment Stations, United States Department of Agriculture, and various other sources.

Name of Feed.	Dry Matter in 100 Pounds.	Fertilizing Constituents in 1,000 Lbs.			Digestible Nutrients in 100 Lbs.		
		Protein.	Fat.	Carbohydrates.	Nitrogen.	Phosphoric Acid.	Potash.
CONCENTRATES.							
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Corn, all analyses.....	89.1	7.9	4.3	66.7	18.2	7.0	4.0
Dent corn	89.4	7.8	4.3	66.7	16.5	.....	.....
Flint corn	88.7	8.0	4.3	66.2	16.8	.....	.....
Sweet corn	91.2	8.8	7.0	63.7	18.0	.....	.....
Corn cob	89.3	0.4	0.3	82.5	5.0	0.6	6.0
Corn and cob meal.....	84.9	4.4	2.0	60.0	14.1	5.7	4.7
Corn bran	90.9	7.4	4.6	59.3	16.3	12.1	6.8
Gluten meal	91.8	25.8	11.0	43.3	50.3	3.3	0.5
Germ meal	89.6	9.0	6.2	61.2	26.5	8.0	5.0
Starch refuse	91.8	11.4	6.5	58.4	22.4	7.0	5.2
Grano-Gluten	94.3	26.7	12.4	38.8	49.8	5.1	1.5
Hominy chops	88.9	7.5	6.8	55.2	16.3	9.8	4.9
Glucose meal	91.9	30.3	14.5	35.3	57.7	.....	.....
Sugar meal	93.2	18.7	8.7	51.7	36.3	4.1	0.3
Gluten feed	92.2	20.4	8.8	48.4	38.4	4.1	0.3
Wheat	89.5	10.2	1.7	69.2	23.6	7.9	5.0
High-grade flour	87.6	8.9	0.9	62.4	18.9	2.2	1.5
Low-grade flour	87.6	8.2	0.9	62.7	28.9	5.6	3.5
Dark feeding flour.....	90.3	13.5	2.0	61.3	31.8	21.4	10.9
Wheat bran	88.1	12.2	2.7	39.2	26.7	28.9	16.1
Wheat bran, spring wheat.....	88.5	12.9	3.4	40.1	.....	.....	.....
Wheat bran, winter wheat.....	87.7	12.3	2.6	37.1	.....	.....	.....
Wheat shorts	88.2	12.2	3.8	50.0	28.2	13.5	5.9
Wheat middlings	87.9	12.8	3.4	53.0	26.3	9.5	6.3
Wheat screenings	88.4	9.8	2.2	51.0	24.4	11.7	8.4
Rye	88.4	9.9	1.1	67.6	17.6	8.2	5.4
Rye bran	88.4	11.5	2.0	50.3	23.2	22.8	14.0
Rye shorts	90.7	11.9	1.6	45.1	18.4	12.6	8.1
Barley	89.1	8.7	1.6	65.6	15.1	7.9	4.8
Malt sprouts	89.8	18.6	1.7	37.1	35.5	14.3	16.3
Brewers' grains, wet.....	24.3	3.9	1.4	9.3	8.9	3.1	0.5
Brewers' grains, dried.....	91.8	15.7	5.1	36.3	36.2	10.3	0.9
Oats	89.0	9.2	4.2	47.3	20.6	8.2	6.2
Oat meal	92.1	11.5	5.9	52.1	23.5	.....	.....
Oat feed or shorts.....	92.3	12.5	2.8	46.9	17.2	9.1	5.3
Oat dust	93.5	8.9	5.1	38.4	21.6	.....	.....
Oat hulls	90.6	1.3	6.6	40.1	5.2	2.4	5.2
Rice	87.6	4.8	0.3	72.2	10.8	1.8	0.9
Rice hulls	91.8	1.6	0.6	44.5	5.8	1.7	1.4
Rice bran	90.3	5.3	7.2	45.1	7.1	2.9	2.4
Rice polish	90.0	9.0	6.5	56.4	19.7	26.7	7.1
Buckwheat	87.4	7.7	1.8	49.2	14.4	4.4	2.1
Buckwheat hulls	86.8	2.1	6.0	27.9	4.9	0.7	5.2
Buckwheat bran	89.5	7.4	1.9	30.4	36.4	17.8	12.8
Buckwheat shorts	88.9	21.1	5.5	33.5	.....	.....	.....
Buckwheat middlings	87.3	22.0	5.4	33.4	42.8	21.9	11.4

TABLE III—Continued.

Name of Feed.	Dry Matter in 100 Pounds.	Digestible Nutrients in 100 Lbs.			Fertilizing Constituents in 1,000 Lbs.		
		Protein.	Fat. •	Carbohydrates.	Nitrogen.	Phosphoric Acid.	Potash.
CONCENTRATES—Concluded.							
Sorghum seed	Lbs. 87.2	Lbs. 7.0	Lbs. 3.1	Lbs. 52.1	Lbs. 14.8	Lbs. 8.1	Lbs. 4.2
Broom-corn seed	85.9	7.4	2.9	48.3	16.3	.....	.....
Kafir corn	84.8	7.8	2.7	57.1	.....	.....	.....
Millet	86.0	8.9	3.2	45.0	20.4	8.5	3.6
Flax seed	90.8	20.6	29.0	17.1	36.1	13.9	10.3
Linseed meal, old process.....	90.8	29.3	7.0	32.7	54.3	16.6	13.7
Linseed meal, new process.....	89.9	28.2	2.8	40.1	57.8	18.3	13.9
Cotton seed	89.7	12.5	17.3	30.0	51.3	12.7	11.7
Cotton-seed meal	91.8	37.2	12.2	16.9	67.9	28.8	8.7
Cotton-seed hulls	88.9	0.3	1.7	33.1	6.9	2.5	10.2
Cocoonut meal	89.7	15.6	10.5	38.3	32.8	16.0	24.0
Palm-nut oil	89.6	16.0	9.0	52.6	26.9	11.0	5.0
Sunflower seed	92.5	12.1	26.0	20.8	22.8	12.2	5.6
Sunflower-seed cakes	91.8	31.2	12.8	19.6	55.5	21.5	11.7
Peanut meal	89.3	42.9	6.9	22.8	75.6	13.1	15.0
Rape-seed meal	90.0	25.2	7.5	23.7	49.6	20.0	13.0
Peas	89.5	16.8	0.7	51.8	30.8	8.2	9.9
Soja (soy) bean	89.2	29.6	14.4	22.3	53.0	18.7	19.0
Cowpea	85.2	18.3	1.1	54.2	33.3	.....	.....
Horse bean	85.7	22.4	1.2	49.3	40.7	12.0	12.9
ROUGHAGE.							
Fodder Corn.							
Fodder corn, green.....	20.7	1.0	0.4	11.6	4.1	1.5	3.3
Fodder corn, field cured.....	57.8	2.5	1.2	34.6	17.6	5.4	8.9
Corn stover, field cured.....	59.5	1.7	0.7	32.4	10.4	2.9	14.0
Hay.							
Timothy	86.8	2.8	1.4	43.4	12.6	5.3	9.0
Orchard grass	90.1	2.8	1.4	42.3	13.1	4.1	18.8
Redtop	91.1	4.8	1.0	46.9	11.5	3.6	10.2
Kentucky blue grass	78.8	4.8	2.0	37.3	11.9	4.0	15.7
Hungarian grass	92.3	4.5	1.3	51.7	12.0	5.5	13.0
Mixed grasses	87.1	5.9	1.2	40.9	14.1	2.7	15.5
Rowen (mixed)	83.4	7.9	1.5	40.1	16.1	4.3	14.9
Meadow fescue	80.0	4.2	1.7	43.3	9.9	4.0	21.0
Soja-bean hay	88.7	10.8	1.5	38.7	23.2	6.7	10.8
Oat hay	91.1	4.3	1.5	46.4	.....	.....	.....
Marsh or swamp hay.....	88.4	2.4	0.9	29.9	.....	.....	.....
White daisy	85.0	3.8	1.2	40.7	.....	.....	.....
Straw.							
Wheat	90.4	0.4	0.4	36.3	5.9	1.2	5.1
Rye	92.9	0.6	0.4	40.6	4.6	2.8	7.9
Oat	90.8	1.2	0.8	38.6	6.2	2.0	12.4
Barley	85.8	0.7	0.6	41.2	13.1	3.0	20.9
Wheat chaff	85.7	0.3	0.5	23.3	7.9	7.0	4.2
Oat chaff	85.7	1.5	0.7	33.0	.....	.....	.....
LEGUME.							
Hay and Straw.							
Red clover, medium.....	84.7	6.8	1.7	35.8	20.7	3.8	22.0
Red clover, mammoth.....	78.8	5.7	1.9	32.0	22.3	5.5	12.2
Alsike clover	90.3	8.4	1.5	42.5	23.4	6.7	22.3
White clover	90.3	11.5	1.5	42.2	27.5	5.2	18.1
Crimson clover	90.4	10.5	1.2	34.9	20.5	4.0	13.1
Alfalfa	91.6	11.0	1.2	39.6	21.9	5.1	16.8
Cowpea	89.3	10.8	1.1	38.6	19.5	5.2	14.7
Soja-bean straw	89.9	2.3	1.0	40.0	17.5	4.0	13.2
Pea-vine straw	86.4	4.3	0.8	32.3	14.3	3.5	10.5

TABLE III—Continued.

Name of Feed	Dry Matter in 100 Pounds.	Digestible Nutrients in 100 Lbs.			Fertilizing Constituents in 1,000 Lbs.		
		Protein.	Fat.	Carbohydrates.	Nitrogen.	Phosphoric Acid.	Potash.
Silage.							
Corn	20.9	0.9	0.7	11.3	2.8	1.1	3.7
Clover	24.0	2.0	1.0	13.5			
Sorghum	23.9	0.6	0.2	14.9			
Alfalfa	27.5	5.0	1.9	8.5			
Grass	32.0	1.9	1.6	13.4			
Cowpea vine	20.7	1.5	0.9	8.6			
Soja bean	25.8	2.7	1.3	8.7			
Barnyard millet and soja bean	21.0	1.6	0.7	9.2			
Corn and soja bean	24.0	1.6	0.7	13.0			
Roots and Tubers.							
Potato	21.1	0.9	0.1	16.3	3.2	1.2	4.6
Beet, common	13.0	1.2	0.1	8.8	2.4	0.9	4.4
Beet, sugar	13.5	1.1	0.1	10.2	2.2	1.0	4.8
Beet, mangel	9.1	1.1	0.1	5.4	1.6	0.9	3.8
Flat turnip	9.5	1.0	0.2	7.2	1.8	1.0	3.9
Rutabaga	11.4	1.0	0.2	8.1	1.9	1.2	4.9
Carrot	11.4	0.8	0.2	7.8	1.5	0.8	5.1
Paranip	11.7	1.6	0.2	11.2	1.8	2.0	4.4
Artichoke	20.0	2.0	0.2	16.8	2.6	1.4	4.7
MISCELLANEOUS.							
Cabbage	15.3	1.8	0.4	8.2	3.8	1.1	4.3
Spurry	20.0	1.5	0.3	9.8	3.8	2.5	5.9
Sugar-beet leaves	12.0	1.7	0.2	4.6	4.1	1.5	6.2
Pumpkin, field	9.1	1.0	0.3	5.8			
Pumpkin, garden	19.2	1.4	0.8	8.3	1.1	1.6	0.9
Trickly comfrey	11.6	1.4	0.2	4.6	4.2	1.1	7.5
Rape	14.0	1.5	0.2	8.1	4.5	1.5	3.6
Acorns, fresh	44.7	2.1	1.7	34.4			
Dried blood	91.5	52.3	2.5		135.0	18.5	7.7
Meat scrap	89.3	62.2	13.7	3	113.9	7.0	1.0
Dried fish	89.2	44.1	10.3		77.5	120.0	2.0
Beet pulp	10.2	0.6		7.3	1.4	0.2	0.4
Beet molasses	79.2	9.1		59.5	14.6	0.5	56.3
Cow's milk	12.8	3.6	3.7	4.9	5.3	1.9	1.8
Cow's milk, colostrum	25.4	17.6	3.6	2.7	28.2	6.6	1.1
Skim milk, gravity	9.6	3.1	0.8	4.7	5.6	2.0	1.9
Skim milk, centrifugal	9.4	2.9	0.3	5.2	5.6	2.0	1.9
Buttermilk	9.9	3.9	1.1	4.0	4.8	1.7	1.6
Whey	6.6	0.8	0.3	4.7	1.5	1.4	1.8

LAW TO REGULATE THE SALE OF FEED STUFFS IN OHIO.

(Under New Code.)

INSPECTION OF FEED STUFFS.

SECTION 1129. Each person, firm or corporation desiring to sell or offer for sale within this state any feed stuffs shall furnish with each car-load or quantity in bulk thereof, or affix to each package thereof in a conspicuous place thereon, a plainly printed certificate of the number of net pounds in each car or quantity in bulk, or in each package, the name or trademark under which it is sold, the name of the manufacturer or shipper, the place of manufacture and a chemical analysis of the product to be sold. Such analysis shall state the percentage of crude protein allowing one per cent. of nitrogen for six and one-fourth per cent. of the protein, of crude fat and of crude fibre. Such certificate shall also state the proportions of corn, oats, rye, wheat, wheat bran, wheat middlings, cotton seed meal, linseed meal, oat hulls, rice hulls, corn cob, or other product contained in such feed stuffs. (99 v. 81 § 1.)

SECTION 1130. Before selling or offering for sale any feed stuffs within this state, each person, firm or corporation shall file with the secretary of the state board of agriculture a certified copy of the certificate required by the preceding section, and deposit with or forward prepaid to him a sealed glass jar containing not less than one pound of such feed stuffs with an affidavit that the quantity so deposited is a fair sample of the product to be sold. (97 v. 396 § 2.)

SECTION 1131. For the privilege of selling or offering for sale within this state any feed stuffs, a person, firm or corporation shall pay on or before the first day of April of each year a license fee to the secretary of the state board of agriculture, for the sale of each brand of feed stuffs, twenty-five dollars. Upon an application and the payment of such fee, the secretary of the state board of agriculture shall issue a license for the current year. All licenses shall expire on the 31st day of December of each year. The payment of a license fee by a person, firm or corporation shall exempt an agent thereof from the requirements of this section. (97 v. 396 § 3.)

SECTION 1132. The term "feed stuffs," as used in this chapter, includes the following and similar articles of commerce: linseed meal, cotton seed meal, pea meal, cocoanut meal, rice meal, gluten meal, gluten feeds, dried brewers' grain, malt sprouts, hominy feeds, cerealine feeds, oat feeds and mixed feeds; but such term shall not include the following if sold as distinct articles of commerce, and not mixed with other substances: hay, straw, whole seeds, mixed meals, made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat, broom corn, wheat bran or middlings, and pure grains mixed and ground together. (97 v. 396 § 4.)

SECTION 1133. Each year at least one analysis shall be made of each brand of feed stuffs sold within this State. All such analyses shall be made under the direction of the secretary of the state board of agriculture, and the expense thereof paid by him from a fund arising from the payment of license fees required by the preceding section. (97 v. 396 § 5.)

SECTION 1134. For the purpose of analysis and comparison, the secretary of the state board of agriculture, or a person appointed by him, may take a quantity not exceeding two pounds from any car-load, quantity in bulk or package of feed stuffs for sale within this state. In the performance of this duty such secretary, or person appointed by him, may enter a car, warehouse, building or other structure containing such feed stuffs. (97 v. 397 § 8.)

SECTION 1135. A person, firm or corporation which sells or offers for sale any kind of meal, ground grain, bran or middlings, adulterated with any other substance shall plainly state on each package thereof the proportions and kind of adulterants used therein. Whoever violates a provision of this section shall be fined not less than ten dollars nor more than two hundred dollars for the first offense, and not less than twenty-five dollars nor more than five hundred dollars for each subsequent offense. (97 v. 397 § 7.)

SECTION 1136. Whoever sells or offers for sale within the state feed stuffs containing a smaller percentage of any of the constituents thereof than it is certified to contain, shall be fined not less than one hundred dollars nor more than two hundred dollars, and shall be liable for damages sustained by the purchaser thereof. A deficiency of two per cent of crude protein or of crude fat, or an excess of two per cent of crude fibre in an analysis of feed stuffs, shall not be evidence of a fraudulent intent. (97 v. 397 § 6.)

SECTION 1137. The secretary of the state board of agriculture shall prosecute all violations of the preceding two sections. Such prosecutions may be before a justice of the peace, police judge or mayor as in cases of violation of laws relating to the adulteration of food and drink and dairy products. (97 v. 397 § 9.)

SECTION 1138. The secretary of the state board of agriculture shall publish annually a report of all analyses made and licenses issued for the sale of feed stuffs with a statement of moneys received from fees and expenses of analyses, and any unexpended balance shall be credited to the agricultural fund. (97 v. 397 § 10.)

Twenty-Second Annual Report

OF

Farmers' Institutes

HELD IN OHIO IN

1911-1912

UNDER THE AUSPICES OF THE

Ohio State Board of Agriculture

(731)

**FARMERS' INSTITUTES HELD IN OHIO DURING SEASON BEGINNING
DECEMBER 11, 1911 AND ENDING MARCH 2, 1912.**

NOTE—The institute law, as amended by the General Assembly March 31, 1906, provides for four institutes in each county, and not to exceed \$31.25 for the expenses of each. Where local expenses exceed this amount, excess is paid by local society. Requests must be filed for such institutes with the State Board of Agriculture before September 1st of each year. All societies should be properly organized before asking for the assignment of an institute.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Adams—			
Winchester.....	December 11-12	100	\$31 25
Manchester.....	December 15-16	63	15 50
Peebles.....	January 8-9.....	117	31 25
Wamsley.....	January 1-2.....	143	31 25
	County average.....	106	\$27 31
Allen—			
Beaverdam.....	December 27-28	159	\$40 15
Hartod.....	January 31-February 1..	335	35 00
Bluffton.....	February 14-15.....	493	47 00
Delphos.....	February 26-27.....	191	31 25
	County average.....	292	\$38 35
Ashland—			
Jeromesville.....	December 11-12	135	\$33 00
Savannah.....	December 15-16	246	39 30
Loudonville.....	February 7-8.....	450	38 00
Polk.....	February 9-10.....	264	32 55
	County average.....	274	\$35 71
Ashtabula—			
Orwell.....	January 5-6.....	50	\$21 50
Pierpont.....	January 29-30	204	29 05
Williamsfield.....	February 9-10.....	164	19 20
Geneva.....	February 28-29.....	125	22 10
	County average.....	136	\$22 96
Athens—			
Coolville.....	December 13-14	125	\$31 25
Amesville.....	January 1-2.....	221	31 25
Albany.....	January 29-30.....	206	26 51
	County average.....	184	\$29 67
Auglaize—			
Waynesfield.....	January 22-23.....	305	\$20 25
Cridersville.....	February 2-3.....	245	40 80
New Bremen.....	February 16-17.....	200	68 50
Buckland.....	February 23-24.....	156	32 75
	County average.....	226	\$42 82
Belmont—			
Barnesville.....	December 15-16	294	\$40 38
Somerton.....	December 22-23	276	27 45
Mcristown.....	January 8-9.....	162	50 00
Centerville.....	January 19-20.....	225	19 75
	County average.....	239	\$34 40
Brown—			
Russellville.....	December 18-19	178	\$32 00
Hamersville.....	January 3-4.....	269	31 25
Mt. Orab.....	January 15-16.....	280	46 50
Fayetteville.....	February 19-20.....	249	31 25
	County average.....	244	\$35 25

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Butler—			
Monroe.....	January 17-18.....	270	\$28 00
Okeana.....	January 22-23.....	240	21 10
Oxford.....	February 9-10.....	258	23 04
Collinsville.....	February 21-22.....	66	32 25
	County average.....	209	\$26 40
Carroll—			
Carrollton.....	December 18-19.....	216	\$30 65
Malvern.....	January 1-2.....	270	31 25
Magnolia.....	January 15-16.....	115	24 00
Sherodaville.....	February 21-22.....	149	27 86
	County average.....	188	\$28 44
Champaign—			
Christiansburg.....	December 27-28.....	165	\$44 00
Magraw.....	January 29-30.....	265	53 85
Mingo.....	February 7-8.....	172	31 25
Mechanicsburg.....	February 12-13.....	445	34 40
	County average.....	262	\$40 88
Clark—			
Selma.....	December 29-30.....	185	\$40 65
Tremont City.....	January 24-25.....	167	29 50
Catawba.....	January 31-Feb. 1.....	213	31 25
Donnelsville.....	February 14-15.....	205	55 21
	County averages.....	192	\$39 15
Clermont—			
Felicity.....	December 20-21.....	350	\$35 00
Newtownsville.....	January 1-2.....	268	34 40
Bethel.....	January 15-16.....	300	32 60
Milford.....	February 14-15.....	425	38 73
	County average.....	336	\$35 18
Clinton—			
Port William.....	January 15-16.....	112	\$28 69
Sabina.....	January 22-23.....	430	31 25
Blanchester.....	February 16-17.....	410	60 00
Clarksville.....	February 23-24.....	300	46 13
	County average.....	313	\$41 52
Columbiana—			
Moultrie.....	January 17-18.....	143	\$21 69
East Palestine.....	January 29-30.....	245	50 00
Lisbon.....	February 14-15.....	450	
Damascus.....	February 26-27.....	780	31 25
	County average.....	404	\$34 31
Coshocton—			
Fresno.....	December 15-16.....	125	\$12 00
Walhonding.....	January 15-16.....	160	37 75
Tiverton.....	February 7-8.....	248	47 61
Isleta.....	February 19-20.....	106	24 80
	County average.....	160	\$30 54
Crawford—			
New Washington.....	January 1-2.....	380	\$32 00
Galion.....	January 19-20.....	405	36 50
Tiro.....	February 5-6.....	315	33 00
Bucyrus.....	February 9-10.....	490	74 25
	County averages.....	398	\$43 94

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Cuyahoga—			
Dover Center.....	January 5-6.....	300	\$31 30
Solon.....	January 24-25.....	260	27 50
Mayfield.....	February 5-6.....	205	31 25
Brecksville.....	February 9-10.....	155	35 62
	County average.....	230	\$31 42
Darke—			
Ansonia.....	December 27-28.....	150	\$4 25
Arcanum.....	January 19-20.....	680	80 00
Gettysburg.....	February 19-20.....	430	31 90
New Madison.....	March 1-2.....	326	47 01
	County average.....	397	\$40 79
Defiance—			
Hicksville.....	January 8-9.....	76	\$31 25
Farmer.....	January 17-18.....	141	30 00
Sherwood.....	January 26-27.....	325	25 60
Defiance.....	February 2-3.....	163	22 55
	County average.....	176	\$27 35
Delaware—			
Sunbury.....	December 27-28.....	167	\$31 25
Ostrander.....	January 5-6.....	174	36 88
Delaware.....	January 17-18.....	406	62 25
Ashley.....	January 29-30.....	371	31 18
	County average.....	280	\$40 39
Erie—			
Perkins.....	January 1-2.....	190	\$31 25
Beilin Heights.....	January 8-9.....	119	5 00
Milau.....	January 31-Feb. 1.....	213	31 25
Castalia.....	February 14-15.....	312	31 25
	County average.....	208	\$24 69
Fairfield—			
Bremen.....	December 22-23.....	304	\$46 55
Amanda.....	January 15-16.....	269	34 00
Basil.....	January 29-30.....	286	31 25
Carroll.....	February 16-17.....	356	57 25
	County average.....	304	\$42 26
Fayette—			
Jeffersonville.....	January 3-4.....	534	\$67 20
Moons.....	January 8-9.....	162	55 65
Good Hope.....	January 24-25.....	360	33 75
	County average.....	352	\$52 20
Franklin—			
Hilliards.....	December 18-19.....	140	\$42 10
Pleasant Corners.....	January 24-25.....	215	47 25
Groveport.....	Jan. 31-Feb. 1.....	200	40 01
Westerville.....	February 14-15.....	384	47 09
	County average.....	235	\$44 11
Fulton—			
Wauseon.....	January 19-20.....	300	\$30 50
Fayette.....	January 24-25.....	380	76 55
Archbold.....	February 7-8.....	400	35 00
Metamora.....	February 19-20.....	214	28 00
	County average.....	323	\$42 51

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Gallia—			
Bethesda Church	December 15-16	126	\$18 35
Centenary Church	December 18-19	89	30 60
Rio Grande	December 18-19	159	18 75
Eno	February 2-3	184	53 30
	County average.....	139	\$30 25
Geauga—			
Burton	December 11-12	120	\$31 25
Huntsburg	January 1-2	129	31 25
Chesterland	January 26-27	179	29 81
Thompson	February 2-3	250	34 43
	County average.....	170	\$31 68
Greene—			
Bellbrook	January 17-18	229	\$45 00
Cedarville	January 29-30	375	32 20
Jamestown	February 5-6	470	57 10
	County average.....	358	\$44 77
Guernsey—			
Cambridge	December 11-12	89	\$22 50
Fairview	December 18-19	160	87 55
Antrim	January 5-6	109	27 45
Pleasant City	January 17-18	154	61 10
	County average.....	128	\$49 65
Hamilton—			
Blue Ash	December 29-30	265	\$50 00
Miami	January 17-18	342	41 13
Springdale	January 19-20	155	36 25
Newtown	February 23-24	210	31 25
	County average.....	243	\$39 66
Hancock—			
Mt. Cory	December 29-30	320	\$31 35
Vanlue	December 27-28	178	75 00
McComb	January 17-18	258	54 55
Arlington	February 12-13	500	31 25
	County average.....	314	\$48 04
Hardin—			
Dunkirk	December 11-12	235	\$44 00
Mt. Victory	December 22-23	120	19 87
Forest	January 19-20	201	75 00
Keiton	January 22-23	121	25 00
	County average.....	169	\$40 97
Harrison—			
New Rumley	December 20-21	148	\$24 41
Deersville	January 3-4	235	24 18
Piedmont	January 24-25	155	32 15
Jewett	February 19-20	238	29 50
	County average.....	194	\$27 56
Henry—			
Napoleon	December 27-28	75	\$33 00
Malinta	January 5-6	190	36 00
Deshler	Jan. 31—Feb. 1	485	31 60
Hamler	February 23-24	144	41 25
	County average.....	223	\$36 24

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Highland—			
Sinking Springs	December 13-14	327	\$51 25
Highland	December 22-23	98	32 00
Lynchburg	January 3-4	231	37 65
Mowrystown	February 19-20	326	55 00
	County average.....	245	\$13 97
Hocking—			
Logan	December 18-19	200	\$31 25
Laurelville	January 22-23	280	55 39
	County average.....	240	\$43 32
Holmes—			
Winesburg	December 11-12	260	\$34 85
Killbuck	February 9-10	262	31 25
Glermont	February 16-17	485	26 50
Nashville	February 23-24	307	32 20
	County average.....	328	\$31 20
Huron—			
Norwalk	January 17-18	196	\$38 10
Wakeman	January 24-25	202	26 94
North Fairfield	February 2-3	250	32 25
Greenwich	February 14-15	405	35 85
	County average.....	288	\$33 28
Jackson—			
Rocky Hill	December 11-12	111	\$20 50
Oak Hill	December 18-19	143	33 50
Glade	December 22-23	133	31 25
Wellston	February 23-24	90	21 25
	County average.....	119	\$26 62
Jefferson—			
Mt. Pleasant	December 20-21	181	\$60 00
Bloomington	December 22-23	173	50 00
Smithfield	January 26-27	239	120 00
Richmond	February 16-17	450	160 00
	County average.....	261	\$97 50
Knox—			
Centerburg	December 15-16	77	\$32 00
Esto	December 18-19	270	31 25
Danville	January 17-18	254	27 79
Fredericktown	February 14-15	248	30 00
	County average.....	212	\$30 26
Lake—			
Perry	January 3-4	122	\$22 27
Madison	Jan. 31-Feb. 1	175	32 66
	County average.....	148	\$27 46
Lawrence—			
Chesapeake (Bethel Chapel)	December 20-21	105	\$30 85
Arabia	January 1-2	221	31 25
Hanging Rock	February 5-6	124	48 70
	County average.....	150	\$36 93

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Licking—			
Vanatta	December 20-21	240	\$31 00
Brownsville	December 22-23	116	30 00
Alexandria	February 5-6	424	33 30
Jersey	January 15-16	145	30 40
	County average	231	\$31 17
Logan—			
Degraff	January 24-25	268	\$31 25
Zanesfield	Jan. 31-Feb. 1	254	31 25
West Mansfield	February 5-6	409	31 05
Belle Center	February 16-17	520	30 75
	County average	363	\$31 07
Lorain—			
Brownhelm	January 5-6	100	\$29 00
North Ridgeville	January 22-23	260	36 90
Brighton	January 26-27	215	31 75
Grafton	February 12-13	181	31 25
	County average	189	\$32 22
Lucas—			
Sylvania	January 3-4	158	\$30 00
Monclova	January 29-30	214	38 50
Richfield	February 9-10	135	25 72
Whitehouse	February 16-17	243	56 00
	County average	187	\$37 55
Madison—			
Mt. Sterling	January 19-20	315	\$31 25
Plain City	February 2-3	291	31 25
South Solon	February 16-17	304	75 69
West Jefferson	February 21-22	66	40 00
	County average	244	\$44 55
Mahoning—			
Canfield	December 15-16	131	\$31 25
Berlin Center	January 19-20	270	31 25
North Jackson	Jan. 31-Feb. 1	350	47 80
North Lima	February 12-13	215	31 25
	County average	242	\$35 39
Marion—			
Marion	December 11-12	121	\$48 70
Agosta	January 1-2	340	31 25
Waldo	February 2-3	173	12 79
Caledonia	February 9-10	194	31 20
	County average	207	\$38 48
Medina—			
Hinckley	January 3-4	112	\$27 63
Wadsworth	January 19-20	180	34 05
Poe	February 7-8	181	32 09
Spencer	February 26-27	255	37 00
	County average	182	\$32 69
Meigs—			
Chester	December 11-12	255	\$31 25
Dyesville	December 15-16	81	21 00
Tuppers' Plains	December 22-23	88	13 74
Racine	Jan. 31-Feb. 1	350	29 60
	County average	193	\$23 90

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Mercer—			
Montezuma.....	December 29-30	117	\$33 02.
Wabash.....	January 17-18.....	203	28 77
Ft. Recovery.....	February 9-10.....	165	29 95
Chattanooga.....	February 28-29	371	26 25
	County average.....	214	\$29 50
Miami—			
Fletcher.....	December 15-16	197	\$34 75
Casstown.....	January 22-23.....	350	38 65
Bradford.....	January 26-27.....	620	52 25
West Milton.....	February 16-17	362	51 47
	County average.....	382	\$43 03
Monroe—			
Woodsfield.....	December 13-14	200	\$ 9 25
Beallsville.....	December 18-19	138	33 85
Clarrington.....	January 22-23.....	230	31 00
	County average.....	189	\$24 70
Montgomery—			
Trotwood.....	December 27-28	230	\$34 75
Miamisburg.....	January 5-6.....	69	39 30
Farmersville.....	January 19-20.....	350	31 25
Eaglewood.....	January 22-23.....	391	31 50
	County average.....	260	\$34 20
Morgan—			
Cloud.....	December 11-12	135	\$21 50
Mcountville.....	December 15-16	114	24 00
Triadelphia.....	January 5-6.....	46	31 25
Neelyville.....	January 8-9.....	74	22 80
	County average.....	92	\$24 89
Morrow—			
West Point.....	January 3-4.....	161	\$36 25
Chesterville.....	Jan. 31-Feb. 1	151	30 39
Marengo.....	February 7-8.....	242	31 25
Edison.....	February 12-13	357	13 25
	County average.....	278	\$27 78
Muskingum—			
Adamsville.....	December 11-12	150	\$54 70
Rix Mills.....	December 22-23	248	31 25
White Cottage.....	January 5-6.....	145	75 00
Philo.....	February 12-13	196	31 00
	County average.....	185	\$47 99
Noble—			
Batesville.....	December 13-14	290	\$26 00
Dexter City.....	December 15-16	121	29 25
Sharon.....	December 20-21	94	31 25
Summerfield.....	January 26-27.....	141	43 25
	County average.....	161	\$32 44
Ottawa—			
Curtice.....	January 15-16.....	107	\$20 25
Oak Harbor.....	January 22-23.....	250	16 00
Port Clinton.....	Jan. 31-Feb. 1	207	28 50
Elmore.....	February 16-17	170	26 15
	County average.....	183	\$22 72

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Paulding—			
Antwerp	December 29-30	116	\$31 25
Payne	January 15-16	122	35 00
Oakwood	January 19-20	342	31 25
Haviland	February 7-8	141	16 00
	County average	180	\$28 37
Perry—			
Unity	December 18-19	103	\$31 25
Portersville	December 20-21	102	31 25
Rehoboth	January 3-4	188	25 70
Glenford	February 14-15	254	31 25
	County average	162	\$39 86
Pickaway—			
Tarlton	January 1-2	113	\$36 81
Ashville	January 22-23	395	46 50
New Holland	January 26-27	361	31 70
Darbyville	February 2-3	256	40 00
	County average	281	\$38 75
Pike—			
Piketon	December 13-14	135	\$33 50
Latham	December 22-23	80	31 25
Cynthiana	January 5-6	144	47 35
Camp	February 9-10	176	33 06
	County average	134	\$36 29
Portage—			
Atwater	December 18-19	118	\$20 20
Garrettsville	January 15-16	103	22 00
Charlestown	January 22-23	148	16 00
Kent	February 7-8	264	28 10
	County average	158	\$21 57
Pieble—			
New Paris	December 27-28	206	\$31 52
Eaton	January 8-9	122	61 85
Lewisburg	January 24-25	505	40 00
Eldorado	February 12-13	267	40 00
	County average	275	\$43 34
Putnam—			
Ft. Jennings	January 24-25	300	\$38 00
Kalida	January 29-30	276	36 70
Leipsic	February 12-13	240	35 19
Continental	February 21-22	---	41 80
	County average	272	\$37 92
Richland—			
Shelby	December 13-14	218	\$54 50
Shiloh	January 22-23	294	31 39
Lucas	February 2-3	270	30 50
Butler	February 12-13	500	82 25
	County average	320	\$49 66
Ross—			
Clarksburg	December 20-21	184	\$40 91
South Salem	January 1-2	225	40 00
Franklincit	February 19-20	271	24 75
	County average	227	\$35 22

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Continued.

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Sandusky—			
Lindsey	January 15-16	164	\$21 00
Bellevue	January 26-27	255	46 40
Clyde	February 12-13	227	30 60
Gibsonburg	February 16-17	302	33 72
	County average	237	\$32 93
Scioto—			
Mt. Joy	December 15-16	54	\$ 4 79
Haverhill	January 24-25	225	27 40
Lucasville	February 7-8	66	35 00
Scioto	February 21-22	115	23 00
	County average	115	\$22 55
Seneca—			
Bloomville	January 8-9	244	\$30 00
Fostoria	January 29-30	960	146 95
Greenspring	February 2-3	349	46 95
Tiffin	February 19-20	720	64 00
	County average	568	\$71 97
Shelby—			
Houston	December 13-14	---	\$12 20
Pemberton	December 29-30	182	108 14
Sidney	January 26-27	188	31 25
Jackson Center	February 21-22	170	36 15
	County average	151	\$46 93
Stark—			
New Berlin	December 20-21	184	\$31 25
Wilmot	December 27-28	185	31 25
Battlesburg	January 24-25	137	22 99
Marlboro	February 2-3	170	31 25
	County average	169	\$29 18
Summit—			
Inland	December 29-30	350	\$50 15
Hudson	January 3-4	148	31 00
Copley Center	January 17-18	195	82 44
N. Springfield	February 23-24	240	31 25
	County average	233	\$48 71
Trumbull—			
Newton Falls	December 13-14	122	\$33 30
Fowler	January 8-9	90	44 00
Mesopotamia	February 5-6	167	31 00
Vienna	March 1-2	245	30 75
	County average	156	\$34 76
Tuscarawas—			
Stiasburg	December 22-23	41	\$32 50
Fiat	January 15-16	103	31 25
Mineral City	January 26-27	210	31 25
Gnadenhutten	February 21-22	150	31 25
	County average	126	\$31 56
Union—			
York	December 20-21	166	\$30 98
Milford Center	January 8-9	160	35 00
Richwood	January 19-20	405	31 25
Marysville	February 12-13	245	25 00
	County average	244	\$30 56

FARMERS' INSTITUTES HELD IN OHIO DURING 1911-1912—Concluded

County and Town.	Time.	Average Attendance Each Session.	Local Expenses Reported.
Van Wert—			
Venedocia	January 15-16	340	\$31 05
Wren	February 5-6	219	31 25
Convoy	February 23-24	415	42 55
Van Wert	February 26-27	69	50 00
	County average	260	\$38 71
Vinton—			
McArthur	December 11-12	25	\$20 65
New Plymouth	December 20-21	179	41 00
Wilkesville	December 20-21	147	31 25
	County average	117	\$30 76
Warren—			
Waynesville	December 29-30	370	\$40 00
Morrow	January 5-6	217	60 53
Lebanon	January 19-20	300	30 40
Mason	February 7-8	390	32 50
	County average	319	\$40 86
Washington—			
Lowell	December 13-14	153	\$31 25
Barlow	December 22-23	161	31 25
Watertown	January 3-4	241	31 25
Macksburg	February 23-29	162	31 25
	County average	179	\$31 25
Wayne—			
Shreve	December 13-14	75	\$32 00
Congress	January 1-2	224	31 25
Wooster	January 17-18	340	32 50
Smithville	February 5-6	349	57 00
	County average	247	\$28 19
Williams—			
Bryan	January 17-18	138	\$24 60
Montpelier	January 26-27	446	31 00
Kunkle	February 5-6	263	31 25
Edgerton	February 21-22	100	19 10
	County average	237	\$26 49
Wood—			
Tontogany	January 15-16	127	\$26 38
Pemberville	January 29-30	255	5 00
Prairie Depot	February 14-15	335	19 00
N. Baltimore	February 19-20	230	20 30
	County average	237	\$20 17
Wyandot—			
Wharton	December 29-30	194	\$32 60
Nevada	January 19-20	377	42 16
Upper Sandusky	January 24-25	540	47 40
Sycamore	February 14-15	470	32 60
	County average	395	\$38 69
Total number of institutes			341
Total number of sessions			1,705
Total average attendance, each session			79,509
Total average attendance during December			14,520
Total average attendance during January			35,385
Total average attendance during February			29,604
Total attendance, all institutes, all sessions			397,545
Maximum attendance, Seneca County, all sessions			11,365
Minimum attendance, Morgan County, all sessions			1,845
Total local expenses, all institutes			\$12,275 35
Average local expense			36 00
Maximum local expense, Jefferson County			97 50
Minimum local expense, Wood County			20 17

INDEPENDENT FARMERS' INSTITUTES

Reported to Ohio Department of Agriculture, Season 1911 and 1912.

County and Town.	Average Attendance Each Session.	Local Expenses.
Allen—		
Gomer	335	\$35 00
Ashland—		
Nova	351	23 00
Auglaize—		
New Knoxville	223	84 35
Belmont—		
Cclerain	191	89 25
Champaign—		
Kingscreek	130	8 00
Wodstock	210	42 70
Clark—		
North Hampter	168	20 00
Crawferd—		
Crestline	340	79 95
Cuyahoga—		
North Royalton	105	-----
Stroagsville	200	51 00
Fairfield—		
Pleasantville	400	40 00
Guernsey—		
Cumberland	98	10 00
Hancock—		
Rawson	273	80 23
Van Buren	182	30 00
Harrison—		
Freeport	180	25 00
Henry—		
Florida	350	36 15
Highland—		
Sugar Tree Ridge	230	40 00
Holmes—		
Berlin	250	31 50
Huron—		
East Townsend	310	24 00
Licking—		
Utica	350	-----
Logan—		
East Liberty	----	43 00
Lorain—		
Columbia	210	30 25
Kipton	247	48 00
Mahoning—		
Sebring	266	15 00

INDEPENDENT FARMERS' INSTITUTES—Concluded.

County and Town.	Average Attendance Each Session.	Local Expenses.
Medina—		
Litchfield	153	-----
Sharon Center	92	\$63 00
Remsons Corners	130	27 00
Mercer—		
St. Henry	118	50 00
Coldwater	150	15 00
Nepture	209	15 30
Montgomery—		
Germantown	251	67 37
New Lebanon	358	97 05
Vandalia	220	32 55
Centerville	391	33 50
Beardshear Church	-----	21 50
Muskingum—		
Chandlersville	230	30 49
Bloomfield	128	-----
Paulding—		
Grover Hill	200	64 95
Pickaway—		
Williamsport	400	-----
Pike—		
Stockdale	310	85 00
Portage—		
Aurora	55	10 00
Preble—		
West Marchester	235	60 60
Richland—		
Bellville	200	42 56
Sandusky—		
Woodville	290	26 62
Stark—		
Alliance	262	37 00
Summit—		
West Richfield	-----	45 05
Clinton	265	50 00
Tuscarawas—		
Ragersville	175	-----
Van Wert—		
Wetsel	325	9 07
Washington—		
Bartlett	300	18 38
Wayne—		
West Salem	250	45 02
Williams—		
West Unity	350	32 15
Stryket	170	26 45
Wood—		
Perrysburg	320	35 00

Twenty-Third Annual Report

OF

Farmers' Institutes

HELD IN OHIO IN

1912-1913

UNDER THE AUSPICES OF THE

Ohio State Board of Agriculture

(745)

FARMERS' INSTITUTES HELD IN OHIO DURING SEASON BEGINNING DECEMBER 9, 1912
AND ENDING MARCH 1, 1913.

NOTE.—The institute law, as amended by the General Assembly March 31, 1906, provides for four institutes in each county, and not to exceed \$31.25 for the expenses of each. Where local expenses exceed this amount, excess is paid by local society. Requests must be filed for such institutes with the State Board of Agriculture before September 1st of each year. All societies should be properly organized before asking for the assignment of an institute.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Adams—				
Manchester.....	Jan. 24-25.....	Brigham, Herrick, Plotner*.....	322	\$23 65
Peebles.....	December 11-12.....	Allen, Blackford.....	163	31 35
Winchester.....	December 18-19.....	Blackford, Elliott, Rodgers*.....	79	27 41
Wamsley.....	December 9-10.....	Begg, Elliott.....	184	31 25
	County average.....		187	\$28 41
Allen—				
Beaverdam.....	February 5-6.....	Markley, Gordon, Laws*.....	224	\$31 50
Harrod.....	February 17-18.....	Brigham, Burlingame.....	219	33 00
Bluffton.....	February 24-25.....	Gordon, Brigham, Dorsey*.....	580	48 50
Delphos.....	February 21-22.....	Gordon, Thomas, Thompson*.....	465	100 00
	County average.....		372	\$53 25
Ashtand—				
Nova.....	December 30-31.....	Harsh, Tressler.....	336	\$20 00
Polk.....	January 22-23.....	Nicodemus, Blackford, Anderson*.....	170	32 25
Loudonville.....	February 5-6.....	Chamberlain, Hudson.....	342	31 25
Jeromesville.....	January 29-30.....	Thomas, Tressler, Durbin*.....	285	34 25
	County average.....		283	\$29 44
Ashtabula—				
Geneva.....	January 10-11.....	Harsh, Herrick.....	195	\$31 00
Orwell.....	January 8-9.....	Gordon, Housekeeper, Anderson.....	99	21 25
Williamsfield.....	February 3-4.....	Brenneman, Anderson.....	231	23 45
Pierpont.....	February 21-22.....	Harshman, Brenneman.....	200	28 80
	County average.....		242	\$26 12

*Lady speakers.

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Athens—				
Albany.....	December 9-10.....	Hayne, Brenneman.....	136	\$23 00
Coolville.....	December 11-12.....	Lentz, Nicodemus.....	196	31 00
Amesville.....	December 13-14.....	Buchanan, Burlingame, Durbin.....	177	31 25
Athens.....	February 3-4.....	Spencer, Brigham.....	120	19 14
	County average.....		157	\$26 09
Auglaize—				
Cridersville.....	January 8-9.....	Tressler, Chamberlain, Plotner.....	150	\$47 80
Waynesfield.....	Jan. 31-Feb. 1.....	Nicodemus, Hummon, Durbin.....	350	31 20
Buckland.....	February 7-8.....	Smith, Blackford, Laws.....	230	36 25
New Bremen.....	February 26-27.....	Nicodemus, Hummon.....	176	42 95
	County average.....		226	\$39 55
Belmont—				
Barnesville.....	December 16-17.....	Montgomery, Martindale.....	209	\$40 00
Somerton.....	December 18-19.....	Hudson, Nicodemus.....	201	30 40
Loydsville.....	January 3-4.....	Smith, Burlingame.....	86	39 01
Colerain.....	February 5-6.....	Scott, Baldwin, Dorsey.....	227	78 25
	County average.....		181	\$46 91
Brown—				
Sardinia.....	December 13-14.....	Allen, Blackford.....	400	\$40 00
Russellville.....	December 11-12.....	Begg, Elliott.....	172	31 25
Hamersville.....	January 27-28.....	Chamberlain, Markley.....	250	31 25
Fayetteville.....	January 20-21.....	Houskeeper, Scott.....	230	29 00
	County average.....		263	\$32 87
Butler—				
Okana.....	January 13-14.....	Wagner, Smith.....	312	\$22 20
Monroe.....	January 20-21.....	Markley, Tressler, Rodgers.....	---	33 25
Oxford.....	February 5-6.....	Hayne, Hudson.....	217	31 25
Trenton.....	February 12-13.....	Hudson, Blackford, Rodgers.....	175	31 25
	County average.....		235	\$29 49

Carroll—				
Magnolia.....	December 23-24.....	Markley, Hummon.....	140	\$34 20
Malvern.....	January 8-9.....	Allen, Baldwin, Dorsey.....	173	30 00
Sherodsville.....	January 24-25.....	Lentz, Hayne.....	220	31 25
Harlem Springs.....	February 10-11.....	Begg, Moore, Laws.....	282	31 60
	County average.....		204	\$31 76
Champaign—				
Mechaniosburg.....	December 23-24.....	Beggs, Matheny, Plotner.....	200	\$31 00
Magrew.....	January 29-30.....	Nicodemus, Hummon, Rodgers.....	270	40 00
Minco.....	February 12-13.....	Hayne, Burkholder, Thompson.....	170	31 25
Cable.....	February 14-15.....	Brigham, Copeland.....	312	45 00
	County Average.....		217	\$36 80
Clark—				
South Vienna.....	Jan. 31-Feb. 1.....	Markley, Chamberlain, Laws.....	164	\$31 85
Selma.....	December 27-28.....	Nicodemus, Hudson.....	141	21 18
Donnelsville.....	January 6-7.....	Begg, Burlingame.....	217	61 00
North Hampton.....	February 10-11.....	Hudson, Blackford.....	324	50 00
	County average.....		211	\$41 00
Clermont—				
New Richmond.....	December 13-14.....	Begg, Elliott.....	96	\$17 80
Williamsburg.....	December 9-10.....	Allen, Blackford.....	230	26 70
Felicity.....	January 22-23.....	Scott, Herrick, Rodgers.....	365	39 00
Milford.....	February 17-18.....	Blackford, Houskeeper, Rodgers.....	475	42 25
	County average.....		291	\$29 19
Clinton—				
Sabina.....	January 22-23.....	Wagner, Green, Plotner.....	450	\$31 25
New Vienna.....	December 20-21.....	Blackford, Elliott, Rodgers.....	244	59 35
Kingman.....	December 30-31.....	Spencer, Blackford, Rodgers.....	337	31 25
Blanchester.....	February 10-11.....	Hayne, Burkholder.....	430	70 00
	County average.....		365	\$47 96
Columbiana—				
Moultrie.....	January 3-4.....	Baldwin, Houskeeper, Riedinger*.....	9	\$32 75
Damascus.....	January 22-23.....	Burkholder, Harsh, Durbin.....	570	28 10
New Waterford.....	December 23-24.....	Allen, Hurdon, Riedinger.....	199	45 09
Liabon.....	Jan. 31-Feb. 1.....	Gordon, Hudson, Riedinger.....	400	46 00
	County Average.....		319	\$37 96

*Lady speakers.

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Coshocton—				
Mohawk Village.....	January 1-2.....	Wagner, Hummon.....	226	\$19 18
Isleta.....	January 20-21.....	Hayne, Lentz.....	134	18 00
Fresno.....	December 23-24.....	Brigham, Nicodemus, Riedinger.....	162	31 35
Warsaw.....	December 9-10.....	Herrick, Harsh, Durbin.....	168	22 35
	County average.....		170	\$22 72
Crawford—				
New Washington.....	January 3-4.....	Wagner, Hummon.....	262	\$31 25
Bucyrus.....	January 24-25.....	Begg, Hudson, Durbin.....	580	47 70
Tiro.....	February 7-8.....	Chamberlain, Hudson.....	260	51 25
Crestline.....	February 26-27.....	Houskeeper, Wagner.....	145	44 50
	County average.....		312	\$43 67
Cuyahoga—				
Bedford.....	December 30-31.....	Allen, Brigham, Anderson.....	132	\$15 75
Euclid.....	December 27-28.....	Baldwin, Brigham.....	59	30 90
Olmstead Falls.....	January 6-7.....	Herrick, Harsh, Anderson.....	230	45 50
Royalton.....	January 8-9.....	Buchanan, Hummon.....	181	31 25
	County average.....		150	\$30 85
Darke—				
New Madison.....	January 27-28.....	Hummon, Nicodemus, Thompson.....	375	\$58 79
Ansonia.....	December 30-31.....	Begg, Lentz.....	85	6 50
Arcanum.....	January 10-11.....	Wagner, Hudson, Plotner.....	550	110 00
Versailles.....	February 19-20.....	Blackford, Houskeeper, Plotner.....	305	41 75
	County average.....		329	\$54 26
Defiance—				
Sherwood.....	January 24-25.....	Buchanan, Moore, Laws.....	390	\$31 25
Farmer.....	February 7-8.....	Lentz, Nicodemus, Plotner.....	139	31 25
Ney.....	February 5-6.....	Allen, Houskeeper, Rodgers.....	271	31 25
Defiance.....	February 17-18.....	Markley, Nicodemus.....	177	32 30
	County average.....		244	\$31 51

Delaware—					.	
Ashley	January 29-30.....	Wagner, Durbin	390	\$30 35		
Sunbury	January 1-2.....	Hudson, Nicodemus	275	30 65		
Delaware	January 20-21.....	Nicodemus, Allen, Dorsey	200	45 45		
Ostrander	February 3-4.....	Smith, Martindale	233	35 20 ■		
	County average.....		272	\$35 41		
Erie—						
Castalia	January 3-4.....	Brigham, Allen	89	\$31 25		
Perkins	January 13-14.....	Buchanan, Housekeeper	179	31 25		
Berlin Heights	February 5-6.....	Thomas, Moore	203	31 25		
Milan	February 21-22.....	Begg, Green, Dorsey	199	31 25		
	County average.....		167	\$31 25		
Fairfield—						
Bremen	December 30-31.....	Scott, Thomas, Dorsey	285	\$70 00		
Amanda	February 5-6.....	Brigham, Spencer	270	35 00		
Pleasantville	February 12-13.....	Martindale, Scott, Durbin	225	68 00		
Carroll	February 24-15.....	Hayne, Copeland, Rodgers	190	49 10		
	County average.....		192	\$55 52		
Fayette—						
Jeffersonville	January 1-2.....	Spencer, Blackford, Rodgers	390	\$35 00		
Moons	December 9-10.....	Smith, Markey, Rodgers	143	37 00		
Good Hope	January 27-28.....	Hayne, Beekley, Rodgers	315	36 15		
Bloomington	February 12-13.....	Markley, Wagner	205	31 25		
	County average.....		263	\$34 85		
Franklin—						
Hilliard	December 16-17.....	Scott, Markley, Rodgers	130	\$54 95		
Canal Winchester	January 13-14.....	Brigham, Thomas, Dorsey	271	67 75		
Westerville	February 10-11.....	Brigham, Copeland	230	39 30		
Pleasant Corners	February 5-6.....	Wagner, Knisely	145	58 35		
	County average.....		194	\$55 09		
Fulton—						
Swanton	January 27-28.....	Harsh, Moore	350	\$22 70		
Lions	February 26-27.....	Gordon, Dorsey	325	33 50		
Delta	February 19-20.....	Markley, Nicodemus	330	31 25		
Archbold	February 24-25.....	Begg, Knisely	300	40 10		
	County average.....		326	\$31 86		

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Gallia—				
Fairview Church.....	December 8-19.....	Hayne, Beekley.....	126	\$31 25
Kyger.....	January 3-4.....	Markley, Brennenman, Dorsey.....	173	38 50
Sandfork Church.....	December 9-10.....	Hudson, Thomas.....	219	16 00
Rio Grande.....	January 1-2.....	Elliott, Robertson, Dorsey.....	315	31 25
	County average.....		208	\$49 25
Geauga—				
Burton.....	January 29-30.....	Gordon, Hudson, Riedinger.....	111	\$31 25
Huntsburg.....	January 6-7.....	Gordon, Housekeeper.....	139	31 25
Thompson.....	February 19-20.....	Harsh, Brennenman, Anderson.....	210	28 61
Chesterland.....	February 14-15.....	Chamberlain, Gordon, Riedinger.....	186	30 40
	County average.....		161	\$30 39
Greene—				
Ballbrook.....	January 8-9.....	Begg, Burlingame.....	250	\$29 90
Spring Valley.....	Jan. 31-Feb. 1.....	Hayne, Beekley.....	471	31 25
Cedarville.....	February 3-4.....	Burkholder, Buchanan, Laws.....	470	31 25
Jamestown.....	February 17-18.....	Wagner, Robertson.....	304	41 85
	County average.....		374	\$33 56
Guernsey—				
Cumberland.....	January 10-11.....	Blackford, Thomas.....	160	\$12 25
Pleasant City.....	December 16-17.....	Smith, Kibler, Durbin.....	166	35 75
Londonderry.....	February 3-4.....	Scott, Baldwin, Dorsey.....	215	26 75
Fairview.....	February 17-18.....	Scott, Hudson, Dorsey.....	238	26 25
	County average.....		195	\$25 25
Hamilton—				
Newtown.....	January 17-18.....	Brigham, Tressler.....	153	\$31 25
Mt. Healthy.....	January 20-21.....	Brigham, Herrick, Plotner.....	132	40 00
Blue Ash.....	February 7-8.....	Martinsdale, Housekeeper, Thompson.....	300	40 00
Miami.....	February 14-15.....	Hudson, Blackford, Thompson.....	379	78 40
	County average.....		241	\$47 41

Hancock—	Rawson	January 10-11	Markley, Scott	238	\$51 35
	Vanue	January 22-23	Gordon, Baldwin	395	100 00
	Mt. Blanchard	January 20-21	Begg, Hudson, Laws	175	83 20
	McComb	February 21-22	Houskeeper, Blackford, Dorsey	560	71 10
	County average			342	\$63 91
Hardin—	Forest	January 24-25	Baldwin, Gordon	400	\$90 00
	Mt. Victory	December 23-24	Scott, Copeland, Plotner	217	16 75
	Dunkirk	January 17-18	Begg, Hudson	208	52 55
	Kenton	February 14-15	Burkholder, Plotner	116	25 00
	County average			235	\$46 07
Harrison—	New Athens	December 20-21	Hudson, Nicodemus, Branson*	120	\$22 75
	Freeport	January 13-14	Baldwin, Riedinger	125	65 00
	Bowerston	December 20-21	Brenneman, Brigham, Branson	385	43 75
	Jewett	Feb. 10-11	Brenneman, Harsh	186	28 00
	County average			204	\$39 87
Henry—	Florida	February 5-6	Lentz, Blackford	340	\$36 15
	Deshler	February 12-13	Thomas, Nicodemus, Laws	350	50 15
	Holgate	February 21-22	Brigham, Burlingame	145	81 25
	Gretton	February 17-18	Thomas, Gordon	340	31 25
	County average			294	\$49 70
Highland—	Hillsboro	Dec. 11-12	Markley, Smith	230	\$53 10
	Ransboro	December 23-24	Hayne, Beekley, Durbin	144	40 00
	Sugar-tree Ridge	December 16-17	Chamberlain, Matheny	186	15 00
	Lynchburg	January 20-21	Smith, Thomas	379	49 25
	County average			235	\$39 84
Hocking—	Logan	December 18-19	Lentz, Thomas, Durbin	103	\$21 55
	Laurelville	January 6-7	Nicodemus, Robe tson, Dorsey	170	72 72
	County average			136	\$47 13

*Lady speakers.

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Holmes—				
Nashville.....	January 27-28.....	Herrick, Ale.....	375	\$26 30
Berlin.....	January 24-25.....	Thomas, Smith.....	207	33 20
Glenmont.....	January 13-14.....	Hayne, Lentz.....	282	29 95
Holmesville.....	February 14-15.....	Beggs, Moore.....	210	40 90
	County average.....		268	\$32 59
Huron—				
Townsend.....	January 24-25.....	Beekley, Blackford.....	320	\$42 50
Norwalk.....	January 10-11.....	Brigham, Lentz, Anderson.....	117	34 37
Greenwich.....	December 18-19.....	Burlingame, Harsh.....	170	39 20
Olena.....	Jan. 31-Feb. 1.....	Thomas, Tressler, Anderson.....	150	31 25
	County average.....		189	\$36 83
Jackson—				
Cove.....	December 16-17.....	Hayne, Beekley.....	210	\$31 25
Valley Grange Hall.....	December 20-21.....	Chamberlain, Matheny.....	103	23 00
Oak Hill.....	January 29-30.....	Smith, Brigham.....	255	23 70
Wellston.....	February 10-11.....	Scott, Martindale.....	77	32 00
	County average.....		161	\$27 49
Jefferson—				
Smithfield.....	December 18-19.....	Brigham, Brenneman.....	167	\$25 00
Bloomington.....	December 20-31.....	Allen, Buchanan.....	208	31 25
Richmond.....	January 10-11.....	Allen, Baldwin.....	390	150 00
Arena.....	February 12-13.....	Brenneman, Harsh.....	---	42 00
	County average.....		255	\$62 06
Knox—				
Centerburg.....	December 11-12.....	Herrick, Harsh, Branson.....	71	\$32 05
Esto.....	December 13-14.....	Herrick, Harsh.....	235	35 00
Danville.....	December 20-21.....	Markley, Kibler.....	200	42 00
Levering.....	January 13-14.....	Hudson, Begg.....	324	31 25
	County average.....		207	\$35 07

Lake—	Perry	January 8-9	Harsh, Burkholder, Anderson	230	\$32 25	
	Madison	February 10-11	Chamberlain, Gordon	121	31 25	
		County average		176		\$31 75
Lawrence—	Wilgus	December 11-12	Thomas, Hudson	270	\$29 15	
	Sugar Creek	December 20-21	Hayne, Beekley	58	31 25	
	Burlington	January 24-25	Scott, Houskeeper, Plotner	60	11 80	
	Hanging Rock	January 1-2	Brenneman, Markley	187	28 25	
		County average		146		\$25 11
Licking—	Johnstown	December 18-19	Smith Kibler, Durbin	168	\$25 00	
	Utica	January 17-18	Blackford, Beekley	268	49 30	
	Jersey	February 3-4	Chamberlain, Hummon	174	32 25	
	Franklin Grange Hall	February 26-27	Hayne, Copeland, Durbin	165	31 25	
		County average		194		\$34 45
Logan—	West Liberty	January 27-28	Wagner, Laws	315	\$31 25	
	Belle Center	January 13-14	Gordon, Nicodemus, Thompson	386	31 25	
	Degraff	January 24-25	Allen, Nicodemus	204	31 25	
	East Liberty	February 12-13	Copeland, Brigham	275	35 00	
		County average		295		\$32 24
Lorain—	Brownhelm	January 1-2	Allen, Brigham	157	\$22 00	
	Kipton	January 3-4	Harsh, Tressler, Anderson	180	42 40	
	North Ridgeville	January 10-11	Hummon, Buchanan, Dorsey	273	32 80	
	Columbia Center	February 26-27	Blackford, Brigham, Anderson	242	34 36	
		County average		208		\$32 89
Lucas—	Waterville	January 29-30	Harsh, Moore, Thompson	161	\$21 00	
	Holland	January 27-28	Houskeeper, Baldwin, Laws	146	32 60	
	Berkey	January 20-21	Moore, Buchanan	135	31 20	
	Gleaners' Hall (Spencer Twp.)	February 10-11	Buchanan, Houskeeper	215	31 25	
		County average		164		\$29 01

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Madison—				
Plain City.....	February 7-8.....	Brigham, Spencer.....	188	\$31 25
Mt. Sterling.....	January 0-11.....	Begg, Burlingame, Plotner.....	159	35 00
West Jefferson.....	February 5-6.....	Smith, Martindale, Durbin.....	185	34 00
Sedalia.....	February 14-15.....	Wagner, Markley, Thompson.....	199	35 00
	County average.....		190	\$33 81
Mahoning—				
North Lima.....	Jan. 31-Feb. 1.....	Baldwin, Houskeeper, Riedinger.....	240	\$31 25
Canfield.....	December 30-31.....	Baldwin, Houskeeper.....	159	3 25
Berlin Centre.....	January 6-7.....	Baldwin, Allen, Riedinger.....	194	30 00
North Jackson.....	December 27-28.....	Buchanan, Brennehan.....	173	2 70
	County average.....		190	\$36 30
Marion—				
Agosta.....	January 10-11.....	Nicodemus, Robertson, Dorsey.....	53	\$31 25
Marion.....	January 20-21.....	Wagner, Green, Dorsey.....	142	33 51
Caledonia.....	February 7-8.....	Markley, Gordon.....	30	20 46
Waldo.....	February 17-18.....	Hayne, Allen, Durbin.....	257	24 02
	County average.....		253	\$27 31
Medina—				
Litchfield.....	January 29-30.....	Baldwin, Houskeeper, Riedinger.....	137	\$43 90
Spencer.....	January 1-2.....	Harsh, Treasurer, Anderson.....	341	4 90
Sharon Center.....	January 6-7.....	Hummon, Treasler.....	91	22 37
Wadsworth.....	Feb. 28-March 1.....	Wagner, Houskeeper.....	194	107 25
	County average.....		190	\$55 85
Meigs—				
Tuppers' Plains.....	December 11-12.....	Buchanan, Burlingame.....	116	\$20 43
Chester.....	December 13-14.....	Hudson, Thomas, Dorsey.....	235	33 50
Harrisonville.....	December 13-14.....	Hayne, Brennehan, Dorsey.....	232	23 75
Racine.....	January 3-4.....	Elliott, Robertson, Dorsey.....	257	31 25
	County average.....		210	\$27 24

Mercer—				
Ft. Recovery.....	January 8-9.....	Wagner, Hudson, Rodgers.....	175	\$42 65
St. Henry.....	February 3-4.....	Markley, Gordon.....	91	33 10
Coldwater.....	February 7-8.....	Buchanan, Burkholder, Rodgers.....	187	31 25
Chattanooga.....	February 24-25.....	Hummon, Nicodemus.....	342	23 00
	County average.....		199	\$32 50
Miami—				
West Milton.....	February 3-4.....	Nicodemus, Beekley, Rodgers.....	375	\$63 60
Covington.....	Jan. 31-Feb. 1.....	Wagner, Matheny, Laws.....	480	40 00
Bradford.....	December 13-14.....	Smith, Markley, Rodgers.....	380	31 40
Fletcher.....	January 1-2.....	Begg, Lentz, Rodgers.....	326	35 00
	County average.....		390	\$42 50
Monroe—				
Sardis.....	December 9-10.....	Wagner, Beekley.....	250	\$19 68
Woodfield.....	December 18-19.....	Buchanan, Allen, Branson.....	80	19 36
Beallsville.....	January 3-4.....	Herrick, Hayne.....	67	31 00
Clarrington.....	February 14-15.....	Brenneman, Harsh.....	257	24 00
	County average.....		163	\$23 51
Montgomery—				
New Lebanon.....	January 29-30.....	Beekley, Hayne, Laws.....	300	\$115 00
Centerville.....	December 23-24.....	Thomas, Blackford.....	300	32 25
Trotwood.....	January 3-4.....	Begg, Lentz, Plotner.....	214	34 00
Vanda s.....	December 27-28.....	Burlingame, Blackford, Rodgers.....	163	30 73
	County average.....		245	\$53 00
Morgan—				
Neelyville.....	December 9-10.....	Buchanan, Burlingame, Branson.....	135	\$27 85
Reinersville.....	December 13-14.....	Nicodemus, Lentz, Durbin.....	169	21 15
Trisdelphia.....	December 11-12.....	Wagner, Beekley.....	74	31 25
Mountville.....	December 30-31.....	Herrick, Hayne.....	186	23 30
	County average.....		141	\$25 89
Morrow—				
West Point.....	January 17-18.....	Gordon, Nicodemus, Dorsey.....	133	\$74 54
Marango.....	January 22-23.....	Smith, Thomas.....	245	31 25
Chesterville.....	February 19-20.....	Allen, Hayne, Dorsey.....	260	27 00
Edison.....	February 14-15.....	Buchanan, Houskeeper, Anderson.....	370	37 90
	County average.....		252	\$42 67

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Muskingum—				
White Cottage.....	January 8-9.....	Blackford, Thomas.....	185	\$71 28
Dresden.....	December 27-28.....	Hummon, Chamberlain, Dorsey.....	187	40 00
Otsego.....	January 17-18.....	Lentz Hayne Kiedinger.....	142	13 60
Chandlersville.....	February.....	Scott, Martindale, Dorsey.....	254	30 47
	County average.....		192	\$38 80
Noble—				
Batesville.....	December 16-17.....	Nicodemus, Hudson, Durbin.....	190	\$30 50
Renock.....	January 1-2.....	Herrick, Hayne.....	200	22 10
Summerfield.....	January 8-9.....	Smith Elliott.....	70	29 35
Keiths.....	February 7-8.....	Scott, Baldwin.....	210	28 03
	County average.....		167	\$27 49
Ottawa—				
Port Clinton.....	February 7-8.....	Thomas, Moore.....	185	\$31 25
Elmore.....	January 6-7.....	Scott, Markley.....	74	28 4J
Curtice.....	January 17-18.....	Houskeeper, Buchanan, Laws.....	151	20 50
Oak Harbor.....	January 8-9.....	Brigham, Lentz.....	136	29 40
	County average.....		136	\$27 39
Paulding—				
Payne.....	January 27-28.....	Buchanan, Lentz, Durbin.....	190	\$32 00
Oakwood.....	Jan. 31-Feb. 1.....	Brenneman, Blackford, Thompson.....	240	48 85
Antwerp.....	December 27-28.....	Tressler, Kibler.....	180	31 25
Grover Hill.....	February 21-22.....	Wagner, Robertson, Thompson.....	252	31 25
	County average.....		215	\$38 34
Perry—				
Portersville.....	December 20-21.....	Thomas, Lentz.....	93	\$31 25
Rehoboth.....	January 6-7.....	Blackford, Thomas, Dorsey.....	85	31 25
Unity.....	December 30-31.....	Wagner, Smith, Dorsey.....	97	31 25
Glenford.....	January 17-18.....	Scott, Thomas.....	170	31 25
	County average.....		148	\$31 25

Pickaway—				
Tarleton.....	January 3-4.....	Blackford, Spencer, Rodgers.....	65	\$38 39
Darbyville.....	February 7-8.....	Wagner, Knisely.....	206	45 75
Ashville.....	January 8-9.....	Robertson, Nicodemus, Rodgers.....	350	75 73
New Holland.....	January 29-30.....	Markley, Chamberlain.....	400	57 50
	County average.....		255	\$54 34
Pike—				
Latham.....	December 16-17.....	Elliott, Blackford, Rodgers.....	226	\$31 25
Pike-ton.....	December 18-19.....	Chamberlain, Matheny.....	138	37 50
Cynthiana.....	December 27-28.....	Beekley, Hayne.....	138	44 00
Stockdale.....	January 3-4.....	Scott, Thomas, Rodgers.....	300	126 49
	County average.....		200	\$59 81
Portage—				
Kent.....	Jan. 31-Feb. 1.....	Allen, Herrick.....	344	\$29 75
Atwater.....	February 3-4.....	Begg, Brenneman, Anderson.....	181	17 45
Aurora.....	January 10-11.....	Gordon, Houskeeper.....	175	36 00
Windham.....	December 30-31.....	Brenneman, Buchanan.....	147	31 25
	County average.....		212	\$28 61
Preble—				
Eaton.....	February 3-4.....	Hudson, Hayne, Laws.....	476	\$68 00
West Manchester.....	February 5-6.....	Buchanan, Burkholder, Durbin.....	230	56 85
New Paris.....	Feb. 28-March 1.....	Nicodemus, Hummon, Rodgers.....	229	44 15
Eldorado.....	February 19-20.....	Wagner, Robertson, Thompson.....	320	55 75
	County average.....		314	\$56 19
Putnam—				
Continental.....	January 29-30.....	Lentz, Buchanan, Laws.....	324	\$46 55
Pandora.....	January 24-25.....	Markley, Tressler, Laws.....	437	35 00
Leipsic.....	February 19-20.....	Brigham, Burlingame.....	339	35 15
Kalida.....	February 10-11.....	Nicodemus, Thomas.....	218	33 00
	County average.....		329	\$37 42
Richland—				
Shiloh.....	December 20-21.....	Harsh, Burlingame.....	250	\$32 00
Lucas.....	January 27-28.....	Thomas, Tressler.....	290	29 50
Shelby.....	December 23-24.....	Smith, Kibler.....	176	52 00
Lexington.....	January 20-21.....	Blackford.....	330	31 25
	County average.....		261	\$38 19

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Continued.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Ross—				
Frankfort	January 3-4	Nicodemus, Hudson, Thompson	189	\$40 00
South Salem	January 10-11	Smith, Elliott	205	31 25
Clarksburg	February 10-11	Wagner, Thompson	329	41 83
	County average		234	\$37 69
Sandusky—				
Clyde	January 6-7	Lentz, Brigham	212	\$ 7 00
Woodville	February 24-25	Blackford, Thomas	420	34 95
Linsey	February 19-20	Begg, Green, Dorsey	156	31 11
Gibsonburg	February 21-22	Markley, Nicodemus, Plotner	362	38 25
	County average		287	\$27 82
Scioto—				
Haverhill	December 30-31	Elliott, Knisely	183	\$29 25
Scioto	January 27-28	Brigham, Smith	168	20 00
Mt. Joy	January 1-2	Scott, Thomas	116	6 81
Lucasville	January 22-23	Brigham, Houskeeper, Plotner	158	33 43
	County average		157	\$22 37
Seneca—				
Republic	February 3-4	Thomas, Moore	340	\$31 00
Fostoria	Jan. 31-Feb. 1	Harsh, Moore	500	58 25
Attica	January 27-28	Blackford, Brennenman, Durbin	310	39 00
Greenspring	February 24-25	Houskeeper, Wagner, Dorsey	415	35 75
	County average		391	\$40 00
Shelby—				
Jackson Center	February 5-6	Nicodemus, Beekley, Laws	200	\$36 00
Houston	December 30-31	Nicodemus, Hudson, Plotner	195	31 25
Pemberton	December 27-28	Scott, Copeland	195	88 26
Sidney	January 22-23	Markley, Tressler, Laws	255	31 25
	County average		211	\$46 69

Stark—					
New Berlin.....	January 1-2.....	Houskeeper, Baldwin.....	221	\$21 25	
Beach City.....	January 29-30.....	Spencer, Begg, Anderson.....	250	29 45	
Marlboro.....	January 6-7.....	Spencer, Hayne, Anderson.....	191	31 25	
Alliance.....	December 30-31.....	Markley, Hummon.....	238	45 50	
	County average.....		225		\$31 86
Summit—					
Hudson.....	January 8-9.....	Hayne, Spencer, Dorsey.....	149	\$32 00	
Cinton.....	February 3-4.....	Allen, Houskeeper.....	280	50 00	
West Richfield.....	Jan. 31-Feb. 1.....	Begg, Spencer, Anderson.....	159	32 44	
Springfield Center.....	January 24-25.....	Burkholder, Harsh.....	286	31 70	
	County average.....		218		\$36 53
Trumbull—					
Mesopotamia.....	February 5-6.....	Begg, Brenneman.....	154	\$31 00	
Lordstown.....	January 27-28.....	Hudson, Gordon, Riedinger.....	138	27 30	
Kinsman.....	January 20-21.....	Harsh, Burkholder, Durbin.....	200	31 60	
Hartford.....	February 12-13.....	Gordon, Chamberlain.....	301	29 42	
	County average.....		198		\$29 83
Tuscarawas—					
Ragersville.....	January 22-23.....	Lentz, Hayne.....	195	\$26 38	
Sandyville.....	January 17-18.....	Allen, Baldwin.....	108	31 25	
Winfield.....	February 17-18.....	Harsh, Brenneman, Dorsey.....	250	32 50	
Tuscarawas.....	February 12-13.....	Begg, Moore, Anderson.....	245	31 25	
	County average.....		199		\$30 34
Union—					
Millford Center.....	January 22-23.....	Beekley, Allen.....	293	\$35 00	
York.....	December 18-19.....	Markley, Scott.....	133	37 38	
Marysville.....	January 17-18.....	Wagner, Smith, Dorsey.....	360	42 00	
Richwood.....	February 21-22.....	Hayne, Copeland.....	174	32 50	
	County average.....		240		\$34 22
Van Wert—					
Van Wert.....	February 3-4.....	Blackford, Lentz, Durbin.....	300	\$74 06	
Convoy.....	Jan. 31-Feb. 1.....	Buchanan, Lentz, Durbin.....	316	28 85	
Wetzel.....	February 19-2.....	Thomas, Bowsher, Plotner.....	319	44 95	
Venedocia.....	January 6-7.....	Wagner, Hudson.....	145	26 53	
	County average.....		270		\$43 60

FARMERS' INSTITUTES HELD IN OHIO DURING 1912-1913—Concluded.

County and Town.	Date.	Speakers.	Average Attendance.	Local Expenses.
Vinton—				
Wilkesville.....	December 11-12.....	Hayne Brennenman.....	82	\$19 45
New Plymouth.....	Jan. 31-Feb. 1.....	Smith, Brigham.....	137	36 04
Knox.....	December 16-17.....	Thomas, Lentz.....	100	24 94
	County average.....		106	\$26 81
Warren—				
Mason.....	February 7-8.....	Hayne, Hudson, Durbin.....	357	\$30 00
Waynesville.....	December 27-28.....	Thomas, Markley, Rodgers.....	370	40 00
Lebanon.....	January 24-25.....	Green, Wagner.....	277	32 50
Morrow.....	January 13-14.....	Chamberlain, Tressler, Dorsey.....	307	58 85
	County average.....		328	\$40 34
Washington—				
Barlow.....	February 10-11.....	Robertson, Elliott, Dorsey.....	232	\$31 25
Bartlett.....	December 16-17.....	Allen, Buchanan.....	165	35 05
Lower Salem.....	January 6-7.....	Smith, Elliott.....	239	32 00
Watertown.....	December 9-10.....	Lentz, Nicodemus.....	162	31 25
	County average.....		199	\$32 39
Wayne—				
Smithville.....	January 29-30.....	Herrick, Allen, Anderson.....	440	\$36 00
Creston.....	January 27-28.....	Begg, Spencer.....	145	32 00
West Salem.....	December 16-17.....	Harsh, Burlingame, Riedinger.....	165	34 15
Shreve.....	January 10-11.....	Hayne, Spencer.....	275	31 50
	County average.....		256	\$33 41
Williams—				
West Unity.....	January 22-23.....	Buchanan, Moore, Laws.....	310	\$24 85
Montpelier.....	February 12-13.....	Buchanan, Houskeeper.....	435	31 25
Stryker.....	February 14-15.....	Thomas, Nicodemus.....	146	28 00
Edgerton.....	February 26-27.....	Begg, Knisely, Dorsey.....	350	21 40
	County average.....		310	\$26 37

Wool—			
Bloomdale.....	January 29-30.....	Blackford, Brenneman, Thompson.....	274
Tontogany.....	January 8-9.....	Scott, Markley, Plotner.....	166
Perrysburg.....	January 20-21.....	Gordon, Baldwin, Laws.....	200
Prairie Depot.....	February 17-18.....	Begg, Green, Riedinger.....	295
	County average.....		229
			\$31 80
Wyandot—			
Wharton.....	December 20-21.....	Scott, Smith.....	211
Sycamore.....	January 10-11.....	Tressler, Chamberlain.....	350
Upper Sandusky.....	February 3-4.....	Wagner, Knisely, Durbin.....	640
Nevada.....	January 22-23.....	Begg, Hudson, Durbin.....	385
	County average.....		396
			\$41 79

Total number of institutes.....	346
Total number of sessions.....	1,830
Total average attendance, each session.....	79,643
Total attendance, all institutes, all sessions.....	398,215
Total local expenses, all institutes.....	\$12,732 63
Average local expense.....	36 80

INDEPENDENT INSTITUTES 1912-1913.

County.	Town.	Average Attendance.	Expenses.
Allen.....	Gomer.....	247	\$20 00
Auglaize.....	Uniopolis.....	260	30 00
Belmont.....	Centerville.....	153	62 60
Clermont.....	Bethel.....	180	26 85
Clinton.....	Port Williams.....	169	30 00
Columbiana.....	East Palestine.....	170	55 00
Coshocton.....	Tiverton.....	162	9 40
	Walhonding.....	181	40 00
Cuyahoga.....	Strongsville.....	---	32 00
	Mayfield.....	136	33 00
	Brecksville.....	118	67 50
Fairfield.....	Baltimore.....	333	-----
Fulton.....	Metamora.....	150	28 00
	Wauseon.....	355	12 50
	Fayette.....	375	54 20
Hamilton.....	New Haven.....	275	8 50
Hancock.....	Van Buren.....	168	25 00
	Mt. Cory.....	177	17 25
	Jenera.....	265	60 70
Harrison.....	Cadiz.....	214	52 00
	New Rumley.....	65	25 00
	Piedmont.....	119	34 00
Highland.....	Sinking Springs.....	247	53 96
Holmes.....	Killbuck.....	308	17 85
Huron.....	Wakeman.....	112	9 11
	Boughtonville.....	188	-----
Jefferson.....	Mt. Pleasant.....	204	42 70
Knox.....	Fredericktown.....	130	40 00
Licking.....	Vanatta.....	156	7 00
	Alexandria.....	312	8 00
	Brownsville.....	164	15 00
Logan.....	West Mansfield.....	296	18 45
	Quincy.....	159	-----
Lorain.....	Brighton.....	165	-----
	Grafton.....	148	18 45
Mahoning.....	Sebring.....	150	30 00
Medina.....	Hinckley.....	93	29 51
	Remson Corners.....	113	31 41
	Brunswick.....	123	28 00
	Medina.....	132	25 00

INDEPENDENT INSTITUTES 1912-1913—Concluded.

County.	Town.	Average Attendance.	Expenses.
Meigs.....	Rutland.....	137	\$5 25
	Alfred.....	130	10 00
Mercer.....	Montezuma.....	135	5 00
	Wabash.....	218	17 40
Miami.....	Casstown.....	286	80 00
Montgomery.....	Brookville.....	284	49 75
	Farmersville.....	250	122 70
	Germanstown.....	184	40 00
Morgan.....	Cloud.....	120	21 00
	Pleasant Valley.....	42	28 00
Muskingum.....	Bloomfield.....	90	5 77
	Adamsville.....	194	42 50
	Rix Mills.....	246	22 73
Pickaway.....	Williamsport.....	300	25 00
Portage.....	Charlestown.....	92	-----
	Freedom Station.....	100	-----
Putnam.....	Ft. Jennings.....	267	31 85
	Cloverdale.....	137	37 05
Ross.....	Adelphi.....	256	26 50
Seneca.....	Tiffin.....	830	99 50
Stark.....	Battlesburg.....	88	2 50
	Robertsville.....	205	5 00
Summit.....	Bath Center.....	194	58 00
	Manchester.....	218	44 25
Trumbull.....	Howland Corners.....	147	16 00
	Brookfield.....	154	7 50
Washington.....	Lowell.....	145	23 10
Wayne.....	Congress.....	93	15 00
	Orrville.....	355	58 00
Williams.....	Edon.....	170	20 65
	Kimble.....	179	12 55
Wood.....	North Baltimore.....	400	43 90
	Custar.....	250	47 00
	Pemberville.....	200	-----

Ohio Department of Agriculture

Division of Nursery and Orchard Inspection

**Eleventh Annual Report
of the Chief Inspector**

1912

(767)

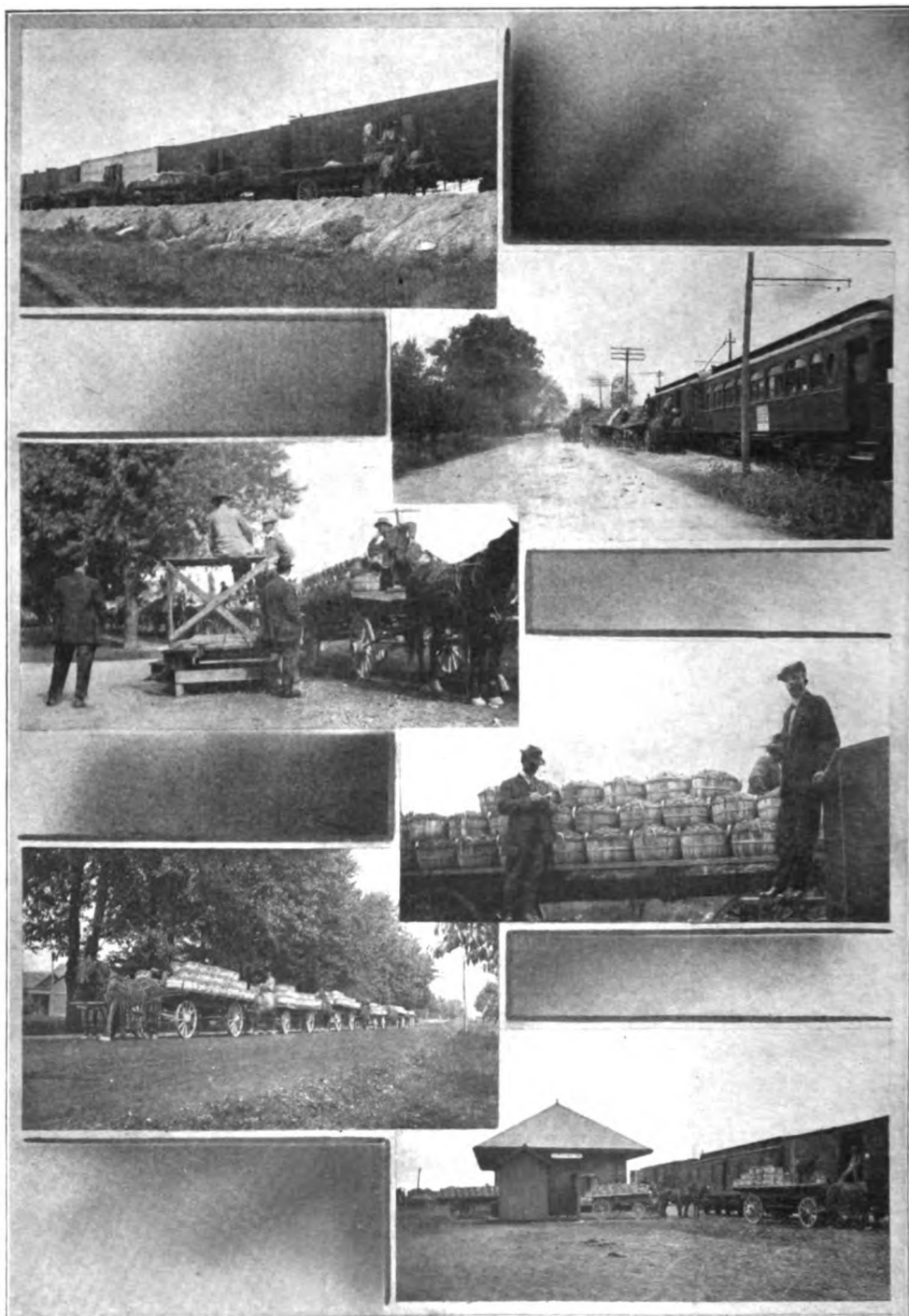


FIG. 1—Scenes at Gypsum, Ottawa County, during peach harvest.
(768)

Annual Report

HON. A. P. SANDLES,

Secretary of the Ohio State Board of Agriculture.

SIR: I transmit herewith the Eleventh Annual Report of the Chief Inspector of Nurseries and Orchards.

During the five years that the work of this Division has been under my charge striking changes have been taking place in the orchard and nursery interests of the State. Not many years ago Ohio ranked fourth in the production of apples. While orchard interests were not centralized to any extent, practically every farm home had its orchard, some of which assumed considerable size and commercial importance, altogether making a very respectable showing with other States. There came a time when it was realized that production of fruit had fallen considerably. Prices began to soar, and good home-grown fruit was hard to find. An examination into conditions revealed the fact that in about a decade the area in apples had decreased by almost one hundred thousand acres, and that over one-half of the apples consumed in the State were being shipped in from outside sources.

A very few of the orchardists in the State had realized the changed conditions which had brought about this loss in production, and were meeting them by the use of scientific orchard methods. On the other hand, hundreds of large orchards were receiving but little care and were fast succumbing to the attack of insect pests, fungus diseases and general neglect.

Farm orchards were in even worse condition, and few of them were producing fruit sufficient and suitable for family use.

While the causes and conditions were understood by scientists and careful observers, it seemed impossible to bring about better methods of orchard practice until high prices and a scarcity of home-grown fruit forced a realization of actual conditions.

The low mark in orchard area was reached in 1908, but since then a change for the better began to take place. This Division was flooded with requests for information concerning proper methods to pursue in rejuvenating orchards, and assistance was earnestly sought. The ravages of insects and diseases, while not entirely responsible for conditions, was the most serious menace to fruit interests and the first problem to be met. Owners of neglected commercial orchards readily took up spraying operations, once they realized the necessity and value of such work. The greatest difficulty has been experienced in encouraging

better care of farm orchards, and but little progress was made until actual demonstrations in this work were given in the orchards.

For several years this Division has each year under taken as much of this work as it has been possible to superintend thoroughly. Other agencies have also been at work, and a vast improvement is to be noted in the orchards of the State. Old orchards have been pruned and renovated and are taking on new life. New areas are being planted, and before a great many years the industry will equal its former importance. A chart is herewith given, showing apple acreage and production for the last ten years. It will be noticed that the area devoted to apples has been gradually increasing of late years.

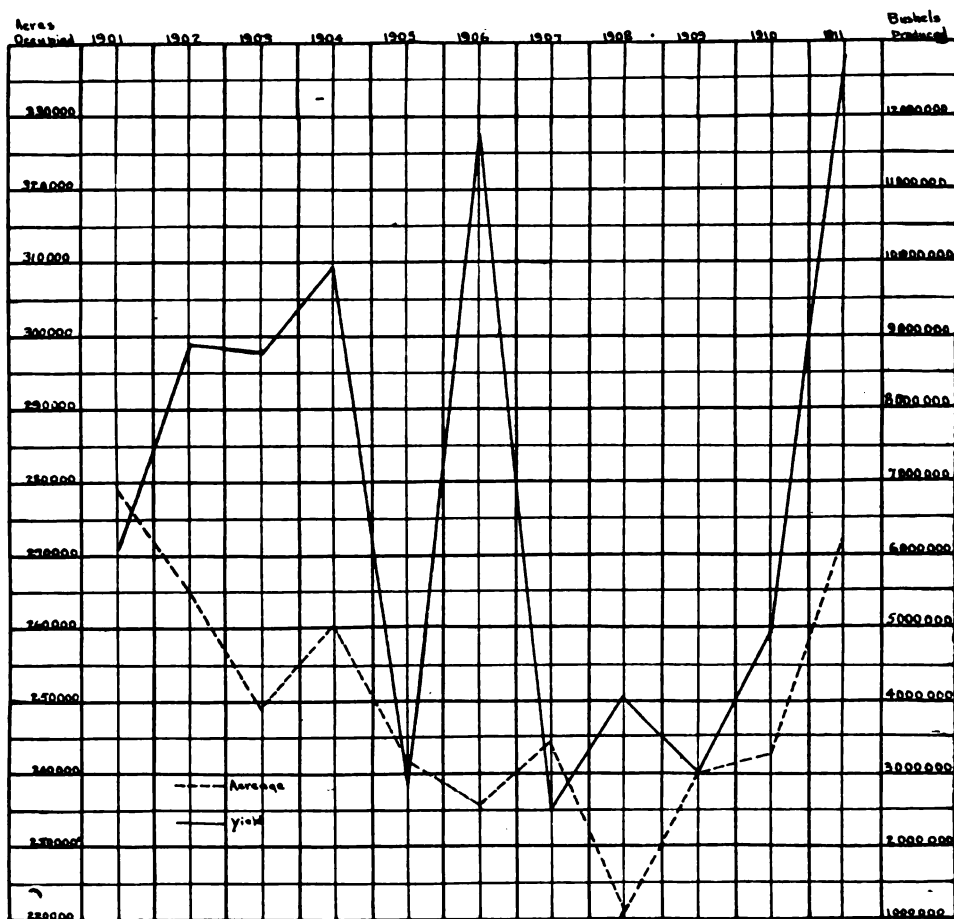


FIG. 2—The acreage and yield of apple orchards in Ohio from 1901 to 1911, inclusive.

The planting which has been done has been well advised. There has been a lack in this State of apple land booms. There has been a lack of orchard stock companies, orchard schemes promoted on the unit system, and other schemes for speculative purposes, which are usually harmful to horticultural interests. The greater part of the planting has been done by individuals and, as a rule, in a very careful manner. Many of the older orchards of the State were planted on land that could not well be used for general crops or other purposes. This was a mistake, as many have discovered, since it has become necessary to give orchards more attention than formerly. The commercial planting of recent years has been done on land best adapted to the proper development of the fruit and with some reference to convenience of orchard operations, transportation facilities, and markets. It has also been our observation that a careful selection of varieties has usually been made. Adaptability to soil, locality and market requirements has usually been well considered. Commercial fertilizers are now being used to some extent and are showing quick and surprising results in the thin upland soils of southern Ohio. The fertility side of the problem has been very much neglected, but will undoubtedly receive more careful attention.

Orchard heaters, as a protection against frost injury, are now to be found in many of the well-cared-for orchards, and satisfactory results are reported from their use. The United States Weather Bureau at Columbus is co-operating with orchardists in sending frost warnings, so that the heating proposition has been placed upon a scientific basis and will be the means of saving many crops which would otherwise be lost.

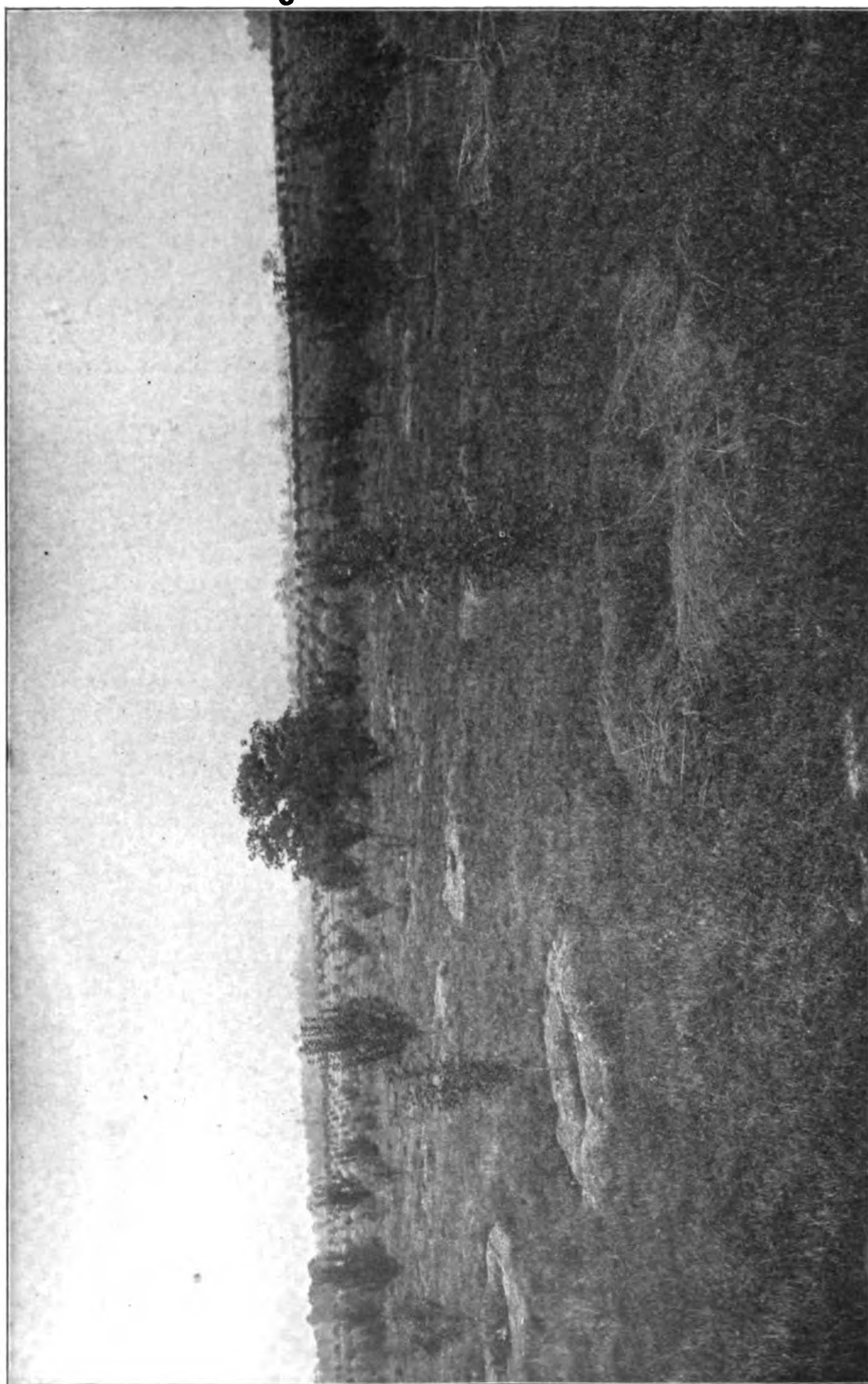


FIG. 3—Properly mulched apple orchard in Union County.

Both the clean culture system with cover crops and the sod mulch system are being used in apple orchards. There is great room here for improvement. The properly mulched orchards are too few by far. The common fault is the failure to use enough mulching material. This is not always available, and yet, if best results are to be secured from this system, it must be thoroughly carried out. This method of culture is used most extensively in the hill orchards of the State, where cultivation is not practicable on account of the danger of washing and mulching material is scarce. No large grain crops are grown, and the prices obtained for straw make its use almost prohibitive for mulching purposes. It therefore becomes a necessity to grow some crops which can be used for this purpose. Some orchardists are following this practice, but too many are relying entirely upon the grass cut in the orchard, and this is seldom adequate for a thorough mulch. The yearly addition of other material is necessary for best results.

Clean culture which cover crops is receiving but little attention in this State from apple orchardists. It is a more expensive system to follow, but undoubtedly would produce excellent results in sections of the State where cultivation can be followed with safety. This system is practiced almost universally by peach growers. In fact, it is the only successful method to use in peach culture. Experience has shown that peach production is neither very successful nor profitable where trees are mulched.

Better packing methods are being agitated, and some advancement is being made. Year after year the price of good well-grown and properly packed fruit is lowered by the presence on the market of inferior and poorly packed fruit which should be made into cider, rather than be placed upon the market.

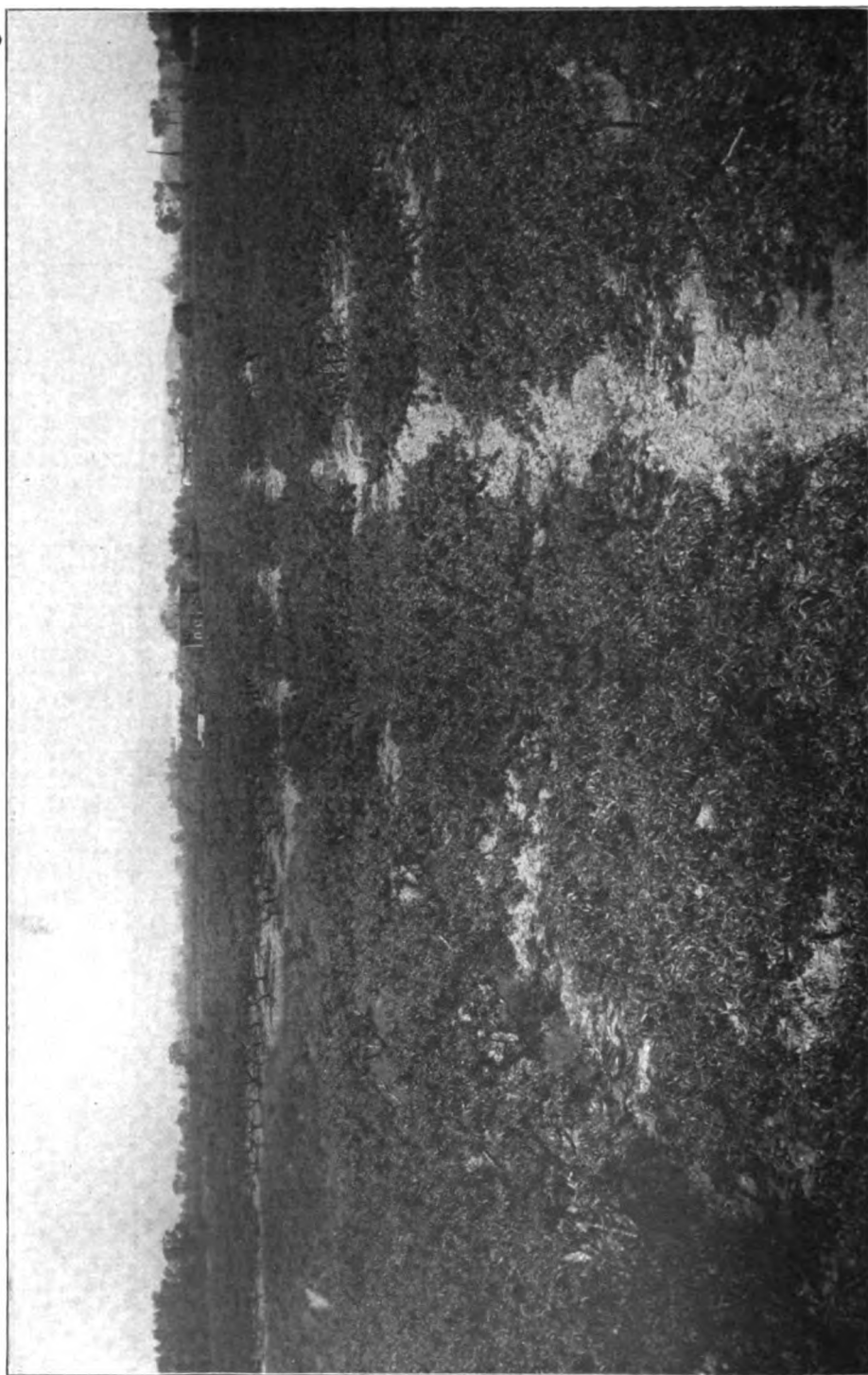


FIG. 4—Ottawa County peach orchard showing open spreading top and clean culture.

The most serious drawback to better methods is the lack of organization among growers. If orchardists could organize and co-operate it would permit of the use of expert packers and greater quantities from which to pack. The orchard interests, especially of apples, with one or two exceptions, are not as yet centralized enough for organization purposes. The individual orchardist who has attempted the box pack has found, first, that it is a slow and expensive process with inexperienced, and second, that he has not grown his fruit to as high a degree of perfection necessary for best results.

Blemishes of different kinds are too numerous, and sufficient uniformity of size is lacking. There is need of better and more thorough spraying practice, also more severe pruning and thinning to develop better and more uniform size and color.

A National law of importance was recently enacted which standardizes packages and grades for apples. It gives the grower the opportunity to guarantee his pack under prescribed labels and assures the purchaser of the uniform size of the contents. Fruit growers should become familiar with its provisions and take advantage of the possibilities which it offers those who desire to pack carefully and honestly.

DATA ON APPLE CULTURE IN OHIO

WITH TABLES GIVING GROSS AND NET RETURNS AND ESTIMATED COST
OF PRODUCTION.

The impressions received by the novice concerning the profits to be derived from apple culture are often misleading. The returns from orchards usually given in newspaper articles and in real estate literature are usually gross returns, and the prospective orchardist with no experience has but little idea of the cost of production, harvesting, marketing, etc. In order to gather some reliable information concerning these matters as they exist in this State, Mr. C. W. Waid, of this Division, has spent considerable time in interviewing orchardists, collecting and preparing the data and tables given herewith.

A list of questions was mailed to all of the orchardists with whom we were acquainted whom we thought might have some valuable records of yields, gross and net returns, etc. These men were asked to answer the questions as fully as they could and to return the list to this Department. Answers were received from less than fifty per cent. of those to whom the list of questions was sent. Of the reports received, a very large per cent. were on apples. The number who reported on other fruits was so small that we cannot make use of them in this report, but will reserve them for a later report. There are so few orchardists in this State who keep careful records that it is not an easy matter to get together a very large number of authentic reports.

The following table gives the result of our canvass:

TABLE No. 1.

No.	Section and County.	Area in acres.	Age of trees— Years	Age at which 1st crop harvested.	Profit 1st ten years.	Gross income per acre per year.	Percentage Gross income Net.
1	Ottawa.....	10	30	12	None	\$110 00	66
2	Lucas.....	5	25	8	None	300 00	60
3	Lorain.....	24	25	11	None	100 00	75
4	Summit.....	12	46	12	None	200 00	50
5	Columbiana.....	15	37	10	None	100 00	60
6	Fairfield.....	20	30	8	\$36 00	250 00	80
7	Washington.....	15	29	Not given	Not given	133 00	70
8	Gallia.....	84	22	7	None	160 00	55
9	Athens.....	8	40	14	None	315 00	Not given
10	Clermont.....	30	40	Not given	Not given	200 00	Not given
11	Lawrence.....	125	30	9	None	100 00	50
12	Lawrence.....	25	22	12	None	160 00	75
13	Lawrence.....	27	27	17	None	80 00	50
14	Lawrence.....	50	22	10	None	100 00	50
	Average.....	32.	30	11	None	\$165 00	62

SECTION B.

No.	Section and County.	Area in acres.	Age of trees— Years	Age at which 1st crop harvested.	Profit 1st ten years.	Gross income per acre per year.	Percentage Gross income Net.
1	Sandusky.....	24	15	Not given	Not given	\$350 00	Not given
2	Auglaize.....	50	14	10	None	70 00	80
3	Knox.....	9	14	8	None	30 00	50
4	Scioto.....	100	12	15	None	20 00	None
5	Hamilton.....	30	11	10	None	32 00	50
	Average.....	38	13	11	None	\$96 00	45

Some of the figures given in Table No. 1 are estimates, rather than actual figures, as some of the growers who sent in reports did not have complete records. The figures were all given, however, by the men who grew and marketed the fruit, and thus should not be far from correct. There certainly is no better source of such information. While we could no doubt get a larger number of reports by continuing to look for growers who keep records, those which we have received are quite generally scattered over the State, and it would seem should give a fairly good idea of what has been done along the line of securing returns from commercial apple growing in Ohio. Most of the reports are from men who have been spraying more or less thoroughly for many years. Nearly all of them have also followed good orchard practice throughout. Those who have not done so have little or nothing to report in the way of profits. There is hardly a grower, however, who thinks he has done as well as he might have done had he been more thorough in his work. These same men will no doubt be able to get better results in the future, as they have the experience and the knowledge of the requirements of the crop and the markets in a greater degree than at any previous time.

The table has been divided into Sections A and B. Section A includes all of the orchards over fifteen years of age, and Section B those fifteen years old or less. The fourteen orchards in Section A have given an average gross return of about \$165 per acre per year, sixty-two per cent of which was net. These averages are given in most cases for a period of five or more years. The five younger orchards have given but \$96 gross per acre per year, forty-five per cent., or about forty-three, of which was net. These averages are given for only two or three years.

One of the most striking parts of these records is that only in one case was there any profit reported during the first ten years. The average age at which the trees came into bearing was eleven years. Of course, there was some fruit produced earlier than this in all of the orchards, and in some good crops were secured under ten years, but on an average no crops of importance were produced until after the tenth year. It will also be noted that both the gross and net returns per acre were much greater after the fifteenth year than before.

To those who have formed an opinion of the profits secured by apple growers through the retail prices they have been obliged to pay, or the inflated figures of profits in apple-growing which they may have seen or heard in connection with land-boomers' stories, these figures may seem small. Our purpose in getting out this report is to put before the prospective orchardist facts and figures which will enable him to engage in the apple business with a better knowledge of what he can expect in the way of returns than he otherwise would have. Many men have planted orchards with little knowledge, not only of probable returns, but of the amount required in the way of investment before substantial returns can be expected. Under such circumstances discouragement



FIG. 5—Lawrence County Apple Orchard.

and failures are almost inevitable. It is our opinion that while the figures given in this report may keep a few from enlisting in the apple-growing business, it will serve to make those who do engage in it more stable and less likely to drop out before the harvest is ripe.

TABLE No. 2.

ESTIMATED COST OF AN APPLE ORCHARD PER ACRE FOR FIRST TEN YEARS ABOVE
COST OF LAND, TAXES, DRAINAGE, INTEREST ON INVESTMENT, ETC.

Item No.		
1	Forty trees at 20 cents	\$8 00
2	Plowing and harrowing 1st year	4 00
3	Planting trees (5 cents per tree)	2 00
4	Disking—both ways once each year (except 1st year)	13 50
5	Cultivating 3 times each year	20 00
6	Pruning and removing brush (once each year)	15 00
7	Spraying twice each year after 1st year	45 00
8	Wiring to protect from rabbits	4 00
9	Cover crop seed for 10 years	15 00
10	Sowing cover crop seed for 10 years	10 00
11	Manure or commercial fertilizer	50 00
12	Supervision	100 00
Total		\$286 50

NOTES AND COMMENTS ON TABLE NUMBER TWO.

ITEM No. 1—*Cost of Trees.* The charge of twenty cents per tree may seem high to some, but the best trees obtainable are none too good to plant when the time the grower must wait for returns is taken into consideration. On the other hand, it is not always the highest-priced trees which prove the most profitable. Some new, untried varieties are frequently offered for sale at several times the price used in the table. Such unknown kinds are usually dear at any price. Cheap trees, however, will always prove dear in the end.

ITEM No. 2—*Plowing and Harrowing.* In some localities an acre of ground can be plowed and put into good condition to plant for less than four dollars, but in other soils the cost would be greater. Thus four dollars would seem to be a good average.

ITEM No. 3—*Planting Trees.* Five cents per tree, or two dollars per acre of forty trees, is certainly a very reasonable estimate of the cost of planting, when the work of getting from the railroad station, heeling in, and staking or marking out the ground is added to that of digging the holes and setting the trees.

ITEM No. 4—*Disking.* Disking both ways once each year in the early spring to loosen the surface soil and cut up the cover crop will certainly cost as much as \$1.50 per year or \$13.50 for nine years. The first season not being counted.

ITEM No. 5—*Cultivating.* Three cultivations after diskings should

keep most orchard soils in good condition until time to sow the cover crop. This is equivalent to cultivating three acres once. The amount of time it will require to do this will depend on the kind of tool used and the nature and condition of the soil. Two dollars per year or \$20.00 for the ten years is certainly a very conservative estimate for this item.

ITEM No. 6—*Pruning and Removing Brush.* The cost of pruning and removing the brush will depend on the kind of soil the trees are planted in, the varieties grown, the regularity with which the work is done and the ability of the men doing the work. It will cost more to prune an orchard properly on a strong than on a poor soil. Some of the growers in Southern Ohio do but little pruning while much more is done in Central and Northern Ohio. Some varieties need much more severe pruning than others to get them trained to the proper shape to produce large yields. By doing a little pruning each year the cost for a period of ten years will be much less than to prune only three or four years out of the ten. Some men can prune trees much faster and better than others. Rapid work should not be secured, however, through lax methods of pruning. If pruning is done at the proper time, it should not require an average outlay of more than \$1.50 per year for the first ten years to prune forty trees and remove the brush or \$15.00 for the ten years. By neglecting to do the pruning at the right time, this expense would be increased.

ITEM No. 7—*Spraying.* Young apple trees should be sprayed at least twice each season even when not producing fruit. In estimating the cost of spraying the forty trees for the first ten years, we have figured on only two sprayings each year after the first year, one while the trees are dormant and one while in foliage. Seasons that the trees produce fruit, additional sprayings will be needed, but the extra expense thus incurred will be met by the return from the first grown. We have estimated that it will take an average of two barrels for each application or four for the season to the acre. Of course during the first few years it would not require that much, but later it will take more than two barrels to each application, thus we believe that two barrels per application per year is a fair average. The cost of the material will vary somewhat according to the locality and the brand and quantity purchased. We have estimated the cost of the material for the four barrels used each season at \$2.50. The cost of preparing and applying the material will vary somewhat, depending on the kind and quality of the outfit used, convenience of the water supply and character of the ground to be driven over. It is not far from correct to say that the mixing and applying of the spray materials will cost as much as the material. Thus the spraying of forty trees or an acre each season will cost \$5.00 per season or \$45.00 for nine seasons, the first year being omitted.

ITEM No. 8—*Protecting From Rodents.* In some favored localities

rabbits do not bother young fruit trees, but as a general thing it is necessary to protect the trees to keep the rabbits from girdling them. The cost of such protection will depend on the material used and the cost of the labor of putting the guards on. If wire screen is used to protect against mice as well as rabbits, the cost of the material will be from six to eight cents per tree. Guards can be made from the one-inch mesh poultry netting at a cost of three or four cents each. Counting material and labor it is certainly conservative to estimate the cost of protection from rodents at ten cents per tree at \$4.00 per acre.

ITEMS NOS. 9 AND 10. The cost of seed for cover crops will depend on the kind of cover crop used. If oats or rye are used the cost will be less than when soy beans or cow peas are used. Estimating the cost of seed at \$1.50 per acre per year and the labor of sowing at \$1.00 per acre per year, the cover crops will cost \$25.00 per acre for ten years.

ITEM No. 11—*Manure and Commercial Fertilizer.* The amount of manure or commercial fertilizer required to grow the trees properly will depend on the amount of humus and plant food there is in the soil to begin with. The soils which are now available for orchard planting in this state have as a rule been cropped more or less and thus are none of them virgin soils such as were used fifty or more years ago. There are few, if any, soils in this State suitable for apple growing which will not produce better tree growth and fruit as well if manure or commercial fertilizer or both are used in reasonable amounts, than if none is applied. To allow \$5 per acre per year or \$50 per acre for a period of ten years for the addition of humus and plant food in the form of manure and commercial fertilizer is probably more than most growers have been supplying, but one of the most successful growers in Ohio whose orchard is on very good soil uses fully double the amount given in the estimate, and he claims that it pays him well. If the ground is cropped a larger amount of manure or fertilizer will be needed to produce maximum results. The crops grown will, however, pay for the additional cost thus incurred.

ITEM No. 12—Most of the bearing orchards in Ohio have been managed by the owners. There is no item which has had more to do with the success or failure of an orchard than the ability of the men back of it. There are numerous examples of complete failure in orchard culture because the man in charge did not understand the fruit business or was lacking in some other quality essential to success in that line of work. When the owner of the orchard can manage it himself the chances of success are much greater than when a man who has no financial interest in the orchard is given charge. When this is impossible, a capable well-trained man should be hired. Such a man should be given a compensation in accordance with the responsibility involved. Of course, a large area would be necessary to make it possible for a high-priced man to

earn his salary. Fifty acres is probably as small an area as it would be policy to hire such a man to manage. It is a good plan where it can be arranged to have the manager financially interested, even in a small way, in the net income when the trees begin to give returns, as it helps to keep him on the job and should increase his interest.

No person except the one to be hired has the right to say what another should pay in the way of salary. However, in order to give those who have no other way of finding out what such service is worth, we have indicated what seems to us a fair compensation. Judging by what managers along other lines of farming which call for similar ability are getting for their services and by what orchard managers in other States and, in a few instances, in this State are getting, we believe that from \$1,000 to \$2,000 per year is reasonable compensation for such work, other things being equal, the larger the orchard the larger should be the salary. There is not as much responsibility involved in the management of a young non-producing orchard as there is with one of bearing age, and the salary per given area need not be as large the first ten years of its age as it should be after that time. The estimate given in Table No. 2 is based on a salary of \$1,000, half of which is to be charged to the labor account and other half to that of managing. Thus the expense to be charged to this item annually is \$10 per acre per year, or \$100 per acre for ten years, when the orchard is fifty acres in extent.

OTHER METHODS COMPARED.

It will be noted that these estimates have been calculated as covering the expenses connected with the growing of an orchard without cropping, but kept in cultivation for the full ten years during the first of the seasons, and in cover crops the latter part of the season and through the winter. This method of managing will no doubt give the best results in most cases when the surface of the ground is level enough to permit of cultivation without serious loss through the washing away of the surface soil. If the soil is rich and well filled with humus, crops may be grown between the trees, especially during the first few years, with little or no injury to the trees. Assuming, of course, that the supply of plant food and humus in the soil is maintained. A few orchardists have been able to pay for a large part of the expense of growing the trees to bearing age by following this method. If the soil is poor, this plan will not be satisfactory, unless a large amount of manure and commercial fertilizer is used.

In the hilly parts of the State very little cultivating is done, except on the more level portions of the hills. If the trees are thoroughly mulched each year and the grass and weeds cut frequently, this plan will give good results and is without doubt the best plan for such locations. The chief objections to the mulch plan are that it permits of lax

methods and that it is very difficult to get enough material for mulching thoroughly. There is not as much difference in the cost of taking care of an orchard under this plan, as compared with cultivation, if both are done properly, as might seem probable. The grass and weeds should be cut two or three times each season, depending on the rate of growth, and that will offset in a large measure the three cultivations.

The cost of the mulch material, including the hauling, will be more, in many cases, than the cost of the cover crop, including the seed and sowing. It requires more work to guard against mice injury in a mulched than in a cultivated orchard. It is sometimes necessary to fight grasshoppers in a mulched orchard, but never in a thoroughly cultivated orchard. These facts are given to show the comparative cost, rather than the comparative merits, of the two systems of orchard management.

TABLE No. 3.

ESTIMATED COST OF GROWING AND MARKETING THE APPLES FROM ONE ACRE
YIELDING EIGHTY BARRELS.

Item No.		
1	Five sprayings, material and labor.....	\$20 00
2	Pruning and removing brush.....	4 00
3	Thinning the fruit.....	5 00
4	Barrels at 40 cents.....	32 00
5	Picking, grading, packing—20 cents per barrel.....	16 00
6	Delivering at station.....	5 00
7	Fertilizer, manure and commercial.....	8 00
8	Supervision.....	10 00
Total		\$100 00

NOTES AND COMMENTS ON TABLE NUMBER THREE.

A study of the accompanying table will give the inexperienced grower an idea of what he can expect in the way of expense in connection with the growing and marketing of an average-sized crop of apples.

ITEM No. 1—*Cost of Spraying.* The estimate is for one dormant spraying and four sprayings when the trees are in foliage. It provides for an average of four barrels (fifty gallons) per application, or five gallons per tree. This may seem excessive to those who have never learned to do thorough spraying. Our experience has taught us that it is not safe to reduce the applications below the number and amount indicated. There may be instances where less material has given good results, but they are the exception, and not the rule. The material for four barrels of dormant spray will cost \$3.36, and for sixteen barrels of foliage spray, \$6.64. This makes a total of \$10 for the material. Estimating the labor at the same figure, the total cost for spraying will be \$20.

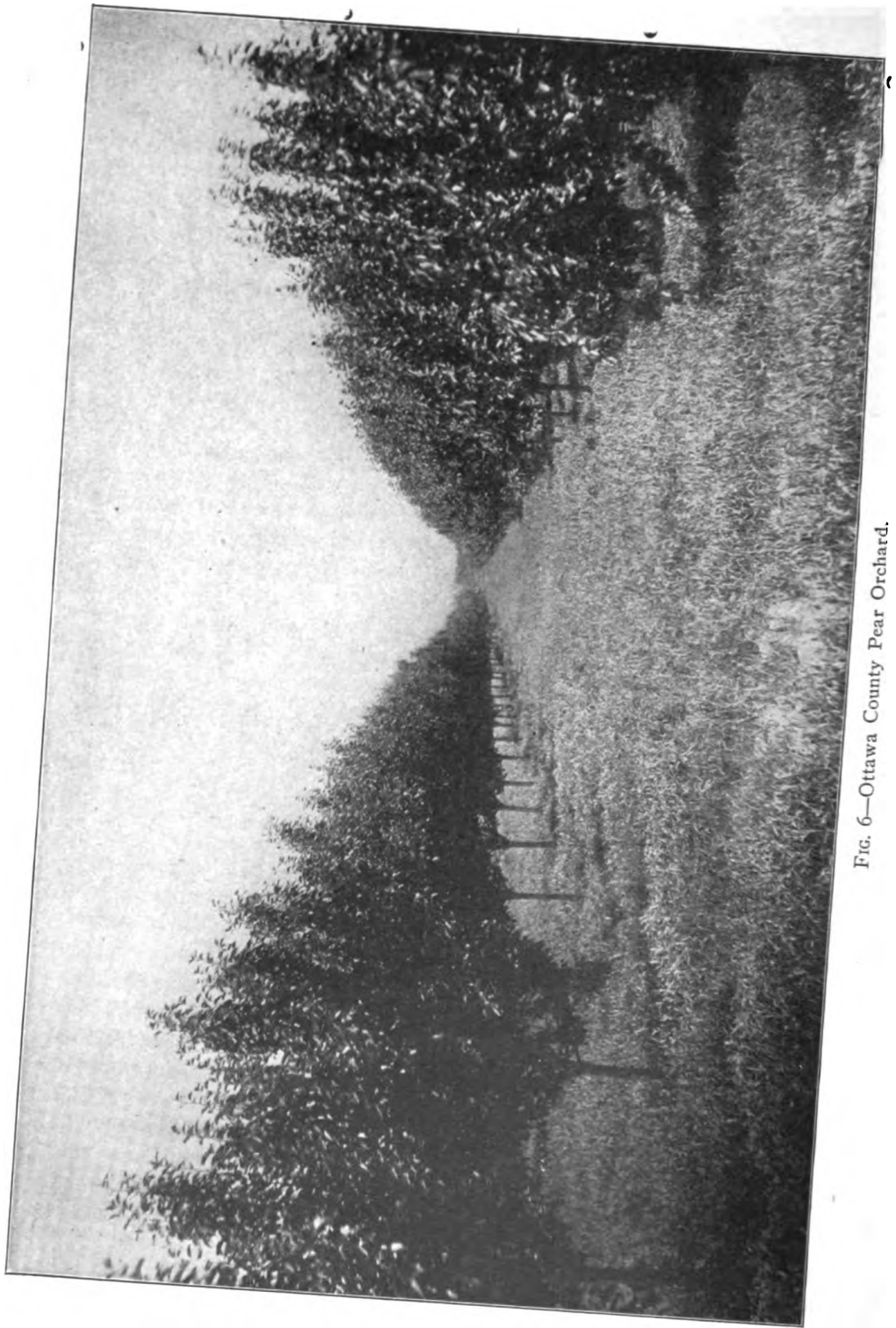


FIG. 6—Ottawa County Pear Orchard.

ITEM No. 2—*Pruning and Removing Brush.* If the pruning has been properly done early in the growth of the trees there will not be a very large amount of pruning needed after the trees have come into bearing. We have estimated that the pruning can be done and the brush removed at a cost not to exceed four dollars. If the trees are neglected for several years the expense of pruning will be increased and the trees more or less damaged.

ITEM No. 3—*Thinning the Fruit.* The thinning of the fruit has not as yet become a general practice. Those who have done some of it, or have seen the results of doing it, cannot help but see the advantage of such labor. Of course, it is not necessary to thin every year, but when the fruit is set thickly on the tree money expended in thinning the fruit is money well spent. We have estimated this item as twelve and one-half cents per tree, or \$5 per acre.

ITEM No. 4—*Barrels.* The cost of barrels or boxes is not greatly different at the present time. Counting the hauling and freight at forty cents per barrel is very reasonable. This makes this item total \$16.

ITEM No. 5—*Picking, Grading and Packing.* This item will vary considerably, according to cost of labor, method of packing, etc. As we have in mind an orchard from which the apples are taken to the railroad in barrels and sold delivered at the station, we have figured on the apples being placed on the sorting tables when picked and graded and packed in barrels at once. We have estimated that this would cost twenty cents per barrel, or \$16 per acre.

ITEM No. 6—*Hauling to Station.* The cost of hauling to the station will vary, of course, depending on the distance and the condition of the road. Few people realize, unless they have had some experience along that line, how rapidly the cost of moving a heavy crop like apples to the shipping point increases as the distance from the orchard to the station lengthens. A few figures will aid in making this point clear. Fifty acres of apples producing at the rate of eight barrels per acre would give a total of four thousand barrels. This would make one hundred and sixty wagonloads of twenty-five barrels each. The cost of moving such a crop different lengths of haul is shown in the following table:

TABLE NO. 4—*Showing Cost of Hauling One Hundred and Sixty Loads of Apples Over Different Lengths of Haul:*

TABLE No. 4.

Number loads hailed per day.	Number of days required.	Price paid per day.	Total cost of hauling.	Cost of hauling per acre.
8	20	\$4 00	\$80 00	\$1 60
4	40	4 00	160 00	3 20
2	80	4 00	320 00	6 40
1	160	4 00	640 00	12 80

From the accompanying table it will be seen that it would cost \$11.20 more per acre to move one hundred and sixty loads of apples a distance which will permit of hauling but one load a day than one over which eight loads a day can be moved. From these figures it will be seen that it would cost a grower over \$100 per acre more to haul ten crops of that size to the station or market over a road ten miles or more in length than it would to haul that many such crops over a road one mile or less in length. This fact should be taken into consideration when the location of an orchard is being selected. If an auto truck can be used, the difference in the cost of hauling the crops different distances would not be as great as it would be when the hauling must be done with wagons, but it would be considerable even then.

ITEM No. 7—*Manure and Commercial Fertilizer*. It requires the addition of more plant food to the soil after the trees come into bearing than before, because more is removed by the bearing than by the non-producing trees. We have allowed \$8 per acre for this item, and in many cases more money could be used in this way very profitably. One reason why many of the orchards in this State have not been more productive is that little or nothing in the way of manure or commercial fertilizer has been applied. Some orchardists make a practice of feeding cattle for market in order that they may have sufficient manure to supply the needs of the trees.

ITEM No. 8—*Supervision*. This subject was discussed at length under notes on Table No. 2, Item No. 12. The estimate given in Table No. 3 for the item of supervision is the same as that for the same item in Table No. 2, or ten dollars per acre per year. However, it represents the minimum salary in the latter case. Even this may seem large to those who have been paying forty or fifty dollars per month for such services. The fact that commercial orcharding has come to be a complex business requiring, for successful managing, a well-trained man who has had much experience along that line, should not be overlooked. Good orchard managers are not plentiful, and for that reason, as well as because of the service rendered, can demand good pay.

HAZARDS.

The business man, especially the manufacturer, who has been accustomed to figuring his profits to a certainty when the cost of production and the selling price are known, is very likely to be deceived if he calculates the profits in apple culture in the same way.

With fruit growing, as well as with most lines of farming, there are things which are beyond the control of the person in charge, and which frequently turn apparent success into partial or total failure.

WRONG VARIETIES.

As we learn more about the adaptability of varieties to certain locations, soils, etc., it becomes easier to select varieties which will give satisfactory results, but it seems that as time goes on it becomes little, if any, easier to secure the varieties true to name. To wait several years for trees to come into bearing and then find that they are not true to name, but often some inferior or worthless varieties, is not only a great disappointment, but financial loss as well. The trees may be top-worked, but even then several years of valuable time are lost. It is impossible to place any true estimate on such a loss, but it often is very heavy.

WIND STORMS.

Every season different sections of the State, and of other States as well, are visited by severe wind storms which not only blow off quantities of apples, but uproot and otherwise damage large numbers of trees. Occasionally an entire orchard is destroyed. As there is no insurance company which will insure against such loss, it always proves disastrous to the party who sustains it.

HAIL STORMS.

Apple growers who live in sections of the State where hail storms are of frequent occurrence know they fairly hold their breath every time a severe storm comes up during the season of the year the fruit is on the trees, for fear of damage to the crop by hail. Hail storms do not, as a rule, cover as large an area as windstorms, nor do they damage the trees so much, but the fruit is frequently entirely ruined. There is no insurance to cover this loss in this State.

FREEZES.

Every few years some apple growers suffer serious loss by the apples freezing while on the trees and afterward falling before they can be picked, or freezing while in piles before they can be sold or stored. This loss is frequently the result of insufficient labor. Some seasons, however, freezes come very suddenly and unexpectedly and cannot easily be avoided.

OFF YEARS.

"Crop failures" is one of the bugbears of apple growing. Many crop failures are due to preventable causes, but late frosts are responsible for more failures than any other one thing. Where thinning is not practiced, overproduction is the cause of many crop failures. The use of heaters is lessening the loss from late frosts, but adding to the expense.

PRICES.

The prices at which apples sell is of vital importance, as it is on this, to a very great degree, that the profit in apple-growing depends. The great variation in, and this uncertainty of the wholesale price, is one of the big risks which the orchardist must assume. In a general way, prices are governed by the demand and supply, and thus beyond the control of the orchardist. There is, however, one way in which the grower can raise the price at which his apples will sell, and that is by improving the quality of the fruit and grading and packing it more carefully. There were quantities of apples sold in Ohio the past season at \$1.50 per barrel, and, on the other hand, a few growers received \$3 to \$4 per barrel. The variation in price was largely due to the difference in the pack and quality of the fruit. It is not far from correct to estimate the cost of production of the fruit that sold at \$1.50 per barrel at \$1 per barrel, leaving a net profit of 50 cents per barrel. The fruit that sold at \$3 per barrel did not cost over \$1.50 per barrel to produce, leaving a net profit of \$1.50 per barrel, or three times as much profit as was realized from the fruit of poorer quality. In order to emphasize this point we have drawn up the following table:

TABLE No. 5.

SHOWING HOW IMPROVED QUALITY OF FRUIT INCREASES THE SELLING PRICE,
AND THUS THE NET PROFIT.

Cost of production per barrel.	Selling price per barrel.	Net profit per barrel.
\$1 00	\$1 50	\$0 50
1 25	2 25	1 00
1 50	3 00	1 50

INSECTICIDES AND FUNGICIDES.

There is pressing need in Ohio of a law regulating the sale of insecticides and fungicides. A National law of this nature was recently enacted which regulates interstate business, but does not affect the manufacturer whose trade lies wholly within the State.

The receipt of numerous complaints from orchardists, stating their failure to secure satisfactory results from the use of commercial lime-sulphur solutions and other spray materials, raised the doubt that possibly some manufactures were not keeping their product up to accepted standards.

In order to investigate, samples were taken on the market of fourteen different brands and submitted to the State Chemist appointed by your Board to analyze samples of commercial fertilizers. The analyses submitted are given below and show very clearly the necessity of a law which would protect the consumer from such fraud and injury.

TABLE OF ANALYSES OF DIFFERENT BRANDS OF LIME-SULPHUR SOLUTION
OBTAINED ON THE MARKET IN OHIO.

	Manufacturer.	Specific Gravity.	Per Cent. Total Sulphur.	Per Cent. C. a. O.
Number 1	-----	1.129	10.56	3.48
Number 2	-----	1.287	24.71	9.55
Number 3	-----	1.266	23.06	9.16
Number 4	-----	1.172	13.88	6.31
Number 5	-----	1.301	25.29	9.96
Number 6	-----	1.308	26.56	10.19
Number 7	-----	1.288	25.16	9.71
Number 8	-----	1.291	25.23	9.53
Number 9	-----	1.273	19.27	7.64
Number 10	-----	1.296	24.81	9.57
Number 11	-----	1.150	8.16	5.50
Number 12	-----	1.223	16.73	7.88
Number 13	-----	1.247	20.84	8.49
Number 14	-----	1.276	23.73	7.47

Twenty-five per cent. of sulphur in solution is accepted as standard, and recommendations for dilution are based upon this amount. It can readily be seen that when some of the brands given in this table are diluted for use according to general recommendations, satisfactory results cannot be expected. If the correct amount of sulphur in solution had been given on the package the solution could have been diluted accordingly and no harm result, provided the purchase price was also adjusted to correspond.

Over one-half of the brands analyzed are entirely too low in essential ingredients and serious loss has resulted from their use, not only to the purchaser, but also to the community where used, by seriously retarding spraying operations. Besides, the business of the manufacturer who keeps his materials up to the standards is also injured by the sale of fraudulent goods.

Too much reliance has been placed on the hydrometer test. So many substances can be used for the purpose of raising the specific gravity that this test is not always a safe guide. In the table given herewith it will be noted that in sample No. 9 the specific gravity is relatively high, while the amount of sulphur is considerably below standard. The manufacturer of this brand confessed to the use of salt, hence the high specific gravity. A hydrometer test of this sample would have been misleading as to the value of the material as an insecticide or fungicide.

In view of the results of these analyses and the many complaints received from careful orchardists concerning their experience with inferior spray material, I recommend that your Board assist in securing the passage of a law regulating the manufacture and sale of insecticides and fungicides sold in this State, whereby the consumer may be assured that the quality of these commodities are kept up to accepted standards.

ORCHARD DEMONSTRATIONS.

This work continues to grow in popularity. The greatest number of requests are received in the spring of the year, usually when inspectors are busy examining and fumigating nursery stock. If the entire force were available for this work a much larger number of demonstrations could be given. This is seldom possible, as there is some work to be done at the nurseries during the entire year.

Over one hundred demonstrations were given, the majority being one-day meetings, in which a few trees were usually pruned and sprayed in addition to talks on orchard methods and practice. The average attendance at these meetings was seventy. Three hundred were present at the largest meeting. Quite often the weather is so disagreeable in the spring of the year that the attendance at some meetings is quite small. Again, insufficient effort is made locally to advertise the meeting and to get interested people out. Increasing interest in these demonstrations is being shown by school superintendents and teachers. The higher grades of the different schools are often present and show very good interest in the work. In addition to these one-day demonstrations twenty-one orchards were selected in different parts of the State, where supervision was given under the direction of the inspectors throughout the year. While it is not possible to take many orchards on this plan, it is of great value to a community because it is possible to give the orchard proper attention through the season and demonstrate the results to be obtained by thorough work.

The plan which we have followed in these orchards during the present year has been to prune several types of trees in the proper manner and then require the owner to complete this work. Spray materials were secured for the orchardist at his expense. He was also required to furnish sufficient help to operate spray outfit. An inspector superintended all spraying operations. In very few cases was the pruning work completed in a very satisfactory manner, but other requirements, with one or two exceptions, were complied with and hearty co-operation was given. It was not always possible to apply each spray at exactly the right time, and yet very satisfactory results were secured in most of the orchards. It is rather difficult to keep advised of the condition of buds in different parts of the State and to have an inspector on hand at the proper time. There are so many things, such as unfavorable weather conditions, accidents to spraying outfits, etc., which cause delays and disarrange well-laid plans.

Exhibits of fruit from these orchards have been made at fairs and apple shows at different times during the year and the showing has been very creditable, comparing favorably with the fruit from orchards having had good care for a larger period of time.

It is to be hoped that this work can be enlarged for the coming year.

Requests are already being received. A larger number of orchards should be taken and the selections be made early enough to allow careful pruning and other necessary preparations. Some assistance should also be given the owners in the packing and marketing of the product of these orchards. Nothing is of more importance at present than demonstrations in proper methods of packing and in the formulation of some plan or arrangement whereby better prices may be secured for orchard products. It seems possible for this Division to render some valuable assistance along this line in connection with these demonstration orchards.

EXHIBIT AT FAIRS.

Two exhibits were equipped and shown in tents at county fairs. Most of the material which goes to make up these exhibits has been prepared at considerable expense, but in a very substantial manner. With good care it should last for a number of years. Remarkable interest in the features of the exhibit was shown at nearly all of the fairs visited. At a very few fairs, where horse racing is practically the only feature, but few people visited the exhibit and the time spent at such places was not worth the expense incurred. This should not condemn the work, as it is of great value as an educational medium and familiarizes many people with the work of the Division.

Fairs were visited in the following counties: Greene, Pike, Morgan, Seneca, Highland, Cuyahoga, Williams, Defiance, Wood, Ottawa, Fairfield, Knox, Morrow, Coshocton, Tuscarawas, Muskingum and Fayette.

The exhibit shown at the State Fair was larger than ever before and was favorably commented on by visitors. Again a fine display of apples was made from the products taken from farm orchards sprayed under the supervision of this Division.

INSTITUTE WORK.

As stated in the report of this Division last year, the plan of assigning four inspectors to institute work was carried out. Lectures on subjects relating to fruit growing and the control of insects and diseases were given at about two hundred institutes. Each inspector was equipped with a light and compact exhibit, consisting of economical insects and fungus diseases, spraying materials, spray nozzles, pruning models, enlarged photographs, and other features pertaining to Division work. This work was well received, and at present many requests are being received for inspectors to address institutes during the present season.

One of the inspectors, Mr. H. J. Speaker, was placed with the "Ohio Booster Car," which was carried over the New York Central Lines within the State during the months of January, February and March. The

horticultural exhibit on this car was one of the striking features and, judging from comments of visitors, did much to arouse interest in the fruit possibilities of Ohio. The average daily attendance at the car was nearly five hundred people. A car of this nature should be sent over every transportation line in the State of Ohio, and would do more to awaken State pride than any other single agency attempted.

NURSERY INSPECTION.

It is a pleasure to report very greatly improved conditions in the nurseries of the State. Inspectors' reports show a smaller percentage of loss from San Jose scale than for many years. This is due quite largely to a decrease in San Jose scale infestation in premises adjacent to nursery grounds. The provision of law permitting the Division to inspect such premises and enforce treatment without petition by nurserymen is a good one. A careful inspection was made of all properties surrounding nurseries and thorough spraying was required and enforced. This work must be done annually if nurserymen are to be protected against loss from this source. The decrease in the number of applications received for nursery inspection has permitted more careful examination of nursery stock, and this has aided somewhat in reducing the amount of infestation.

The requirement of fees for nursery inspection has greatly reduced the number of applications. Many growers of small fruit plants formerly requesting inspection in order to sell a small amount of plants to neighbors find that the amount of business done does not justify the payment of inspection fees and have ceased to apply.

Each year there is an increase in the number of requests received for the inspection of shipments of nursery stock received by orchardists. Most of these shipments are from nurseries outside of the State. Many trees affected with serious pests have been gained in these shipments. The inspection of all incoming stock should be made at destination, and transportation companies should be required to give notice of all shipments entering the State. This would enable the Division to protect the orchardist against serious loss and the community against the introduction of new pests.

Applications received for nursery inspection.....	351
Certificates issued on 1912 inspections	292
Certificates issued on 1911 inspections	22

Many nurserymen growing small fruit plants sell stock only in the spring of the year, and consequently do not pay inspection fees until ready for a certificate. This explains why more certificates have not been issued in proportion to the number of applications received.

ORCHARD INSPECTION.

About five hundred orchards and other premises have been examined by inspectors during the year. The total number of trees inspected was 133,431, covering an area of 2,880 acres. Many of these inspections were in the nature of demonstrations, as some of the orchardists petitioning for inspection invite their neighbors to be present during the inspector's visit.

This work has been done more satisfactory than has heretofore been possible. A larger force of inspectors has enabled us to make inspections promptly, to spend more time in looking over orchards and in discussing orchard methods. The majority of inspections made are of farm orchards. The interest taken in the better care of these orchards has developed remarkably of recent years. In connection with demonstration work these inspections have been largely instrumental in bringing about better conditions.

INSPECTION OF IMPORTED STOCK.

On August 20, 1902, the Plant Quarantine Act became a National law. By its provisions the Secretary of Agriculture at Washington notifies the Department of all imported shipments of nursery stock received at the different ports of entry and en route for this State. Authority is also given the Secretary of Agriculture to prohibit the introduction of nursery stock from any foreign country from which new and dangerous pests are liable to be received, and to quarantine any State, should any new pest become established.

By receiving notice of all imported shipments reaching the State it is now possible to inspect all shipments of this nature. Since the passage of this law 162 notices have been received.

Number shipments received during year	488
Number cases of stock received	3,156
Number of stocks examined	4,099,403

No dangerous or new pests have been discovered during the present year. In several other States egg masses of the gypsy moth have been found during the present year, emphasizing the necessity of the careful inspection of each shipment.

AGENTS AND DEALERS.

Three hundred and ninety-two licenses have been issued to agents.

Sixty-three certificates have been issued to dealers.

When the changes were made in the law with reference to agents and dealers, it was intended to have repealed Section 1115, but in some

manner this was overlooked. Accordingly dealers delivering stock direct to customers in the original package are not required to pay the fee of five dollars. This mistake should be remedied at the coming session of the legislature.

Agents and dealers are better acquainted with the requirements made of them than a year ago, when fees were first required. Less correspondence was necessary in securing sworn statements, and fees. Some difficulty has been experienced in compelling department and five-and-ten-cent stores handling nursery stock to properly qualify as agents or dealers, as the case may be. The principal kinds of stocks handled by these stores are roses and evergreens. Last spring a number of stores, in connection with one of the nurseries, handled a general line of nursery stock. A number of stores ceased to handle nursery stock because of the fees now required.

WINTER INJURY.

The loss of fruit trees from winter injury was more severe than for many years. Very late growth was made in the fall of 1911, because of the many late rains which succeeded a protracted drouth, and trees therefore went into the winter with wood not thoroughly ripened. Exceedingly low temperatures prevailed during the month of January, with fatal results to many fruit trees.

Many old apple orchards throughout northern and western Ohio which were low in vitality, principally from attack of San Jose scale, were completely destroyed. In other orchards a large per cent. of the trees were killed. Careful observations by inspectors place the loss of old apple trees in this part of the State at about seven per cent.

Peach trees suffered most severely along the lake. In Ottawa County, west of Port Clinton, about twenty per cent. of bearing trees were killed and a very light crop of fruit was harvested. In the townships east of Port Clinton the loss was very light, and one of the largest crops in years was harvested in this section of the county.

East of Sandusky peach buds were all killed and many trees also perished. East of Painesville, and especially in the vicinity of Geneva and Conneaut, many large peach orchards have been planted within the last few years. Winter injury at first appeared quite severe in this section. Many young orchards were cut down or back to eight or ten-inch stubs at about the height of the snow line. Other orchards, apparently seriously injured, were pruned rather severely and made satisfactory growth. Most of the orchards cut back to stubs threw out a very vigorous new growth on the majority of the stubs. On many stubs, however, no growth started at all, and an uneven, irregular orchard is the result. About two per cent. is near the actual loss of trees in this section.

Our observations on these frozen trees during the present year seem

to indicate that where the cambium appears uninjured, even though the heart-wood be blackened nearly to the cambium, the best policy is to prune the trees back severely, rather than cut to stubs. This applies to trees planted longer than one year.

In southern Ohio, although the temperature was as low as in the northern part of the State, very few fruit trees were uninjured by the winter, and some splendid peach crops were produced in orchards with good elevations.

It is to be hoped that this work can be enlarged for the coming year. Requests are already being received. A larger number of orchards should be taken and the selections be made early enough to allow careful pruning and other necessary preparations. Some assistance should also be given the owners in the packing and marketing of the product of these orchards. Nothing is of more importance at present than demonstrations in proper methods of packing and in the formulation of some plan or arrangement whereby better prices may be secured for orchard products. It seems possible for this Division to render some valuable assistance along this line in connection with these demonstration orchards.

INSECT NOTES.

SAW FLY.

(*Hylotonia scapularis*)

This insect, reported two years ago to be seriously injuring elm trees in Marietta, has been practically eliminated. Only slight injury to a few scattering trees has been noticed during the last two years. The careful spraying work done by the city has been largely instrumental in bringing about this condition.

ELM LEAF BEETLE.

(*Gallerucella lenteola*)

This insect was first discovered within the borders of the State at Dayton in 1904, and until the present year had not been found outside of that city. On July 2 of the present year Mr. E. W. Mendenhall, of this Division discovered a small outbreak in Troy, Ohio. The infestation was confined to a few trees, and hopes are entertained of keeping the insect under control and, if possible, to eradicate it entirely.

GREEN SOLDIER BUG.

(*Mezara hilarus*)

This insect, which proved so injurious to peach growers in 1911 by its attack on the fruit, was not much in evidence during the present year. A few of the insects were found in different parts of the State, but no injury was noticed and no complaints of injury were received.

SAN JOSE SCALE.

(Aspidiotus perniciosus)

This insect has been found in some localities in southern Ohio heretofore free from infestation. The source of infection in several cases was traced to nurseries south of the Ohio River. Orchardists of this section are urged to have purchases of nursery stock examined before planting, as considerable loss may be averted.

PLANT DISEASES.

This year has been a favorable one for the development of plant diseases. Apple scab and apple blotch, bitter rot and sooty fungus have levied considerable toll on the apple crop of the year. Too few orchardists are spraying specifically for apple blotch and bitter rot, with the result that these diseases are proving very serious ones.

Crown gall still continues a serious foe of apple stock, and heavy losses have been suffered by nurserymen from this disease. The disease is most common on grafted stock where the union usually offers a splendid place for infection. Serious loss to cane fruits was also noted in many plantations, and an occasional orchard tree was found which had succumbed to the attack of the disease.

MISCELLANEOUS.

Bulletin No. 12, The Pruning of Fruit Trees, was issued during the year, and Bulletin No. 11, Fruit Growers' Spray Calendar, was revised in order to include latest recommendations for the control of insects and diseases.

Correspondence and office work have been unusually heavy during the year and the services of two stenographers have been necessary most of the time.

A vast amount of field work has been accomplished, much of it under disagreeable weather conditions. Credit is due the inspectors for their willingness and faithfulness in performing these duties to the best of their abilities.

Mr. F. N. Fagan, who has been with the Division for some time, resigned the first of September to accept the position of Assistant Professor of Horticulture at Pennsylvania State College. Mr. C. W. Waide was temporarily secured to fill this vacancy.

Respectfully submitted,

N. E. SHAW, *Chief Inspector.*

STATISTICAL.

Trees, shrubs, plants and vines condemned by this Division and destroyed by owners:

IN ORCHARDS.

For San Jose scale	1,180 trees
For peach yellows	582 "
For black knot	90 "
Total	1,852

IN NURSERIES.

For San Jose scale	25,214 trees
For scurfy scale	6 "
For wooly aphid and crown gall	25,953 "
For San Jose scale	601 shrubs
For oyster shell scale	7 "
Total	51,781

Trees, shrubs, plants and vines treated in accordance with the directions of this Division:

With lime-sulfur wash for San Jose scale	74,292 trees
With lime-sulfur wash for Oyster shell scale	130 "
With lime-sulfur wash for scurfy scale	433 "
Treated for black knot	385 "
Total	75,240

Nursery stock fumigated with hydrocyanic acid gas for San Jose scale:

Trees and shrubs	4,442,813
Plants	220,485
Total	4,663,298

NURSERY AND ORCHARD DIVISION.

1912.

RECEIPTS.

Total receipts for Nursery Inspection	\$2,140 00
Total receipts for Agents' licenses	342 00
Total receipts for Dealers' licenses	310 00
Fair exhibit	15 00
Total	<u>\$2,807 00</u>

*DISBURSEMENTS.

Salaries of Inspectors and Clerk	\$11,671 35
Expenses of Inspectors	8,331 66
Total	<u>\$20,003 01</u>

LIST OF OHIO NURSERYMEN.

1912-1913.

Name and Address of Owner and Nursery.	Certificate No.	Kind of Stock.	Acres of Stock.
Albaugh, T. F., Clyde, Ohio.....	191	Small fruit plants.....	4
Allen, W. A., & Son, Geneva, Ohio.....	134	General nursery stock.....	30
Altimo Culture Co., Canfield, Ohio.....	252	General nursery stock.....	3
American Rose & Plant Co., Springfield, Ohio.....	71	Ornamental shrubs.....	71
Ashley, E. E., Letart Falls, Ohio.....	277	Small fruit plants.....	5
Ashford, J. C., Rogers, Ohio.....	142	Small fruit plants.....	3
Asplin, David, Rocky River, Ohio.....	214	Small fruit plants.....	3
Aultfather, H. H., Minerva, Ohio.....	262	Small fruit plants.....	7
Bacon, Miss F. I., Perry, Ohio.....	96	Small fruit plants.....	5
Baird & Brady, Eureka Nursery, Troy, Ohio.....	67	General nursery stock.....	35
Baker, C. V., Lancaster, Ohio.....	284	General nursery stock.....	2
Baker, Peter J., South Point, Ohio.....	208	Small fruit plants.....	2
Barbite, D. C. & B. G., Wauseon, Ohio.....	149	Small fruit plants.....	3
Barker, J. H., Middleport, Ohio.....	36	Small fruit plants.....	3
Barnes, A. F. & Son, Mt. Healthy, Ohio.....	221	General nursery stock.....	25
Barnes, M. & Co., Sta. K, Cincinnati, Ohio.....	38	General nursery stock.....	17
Barnes, M. F., Hamilton, Ohio, R. 4.....	243	General nursery stock.....	10
Barr, L. M., Dayton, Ohio, R. 1.....	200	General nursery stock.....	3
Barth, J. F., New Bremen, Ohio.....	160	General nursery stock.....	1
Basinger, J. H., Calla, Ohio.....	272	Small fruit plants.....	4
Beck & Beck, Piqua, Ohio.....	14	Small fruit plants.....	2
Benson Clark, New Carlisle, Ohio.....	112	Small fruit plants.....	3
Bernard, A. F., Painesville, Ohio.....	48	General nursery stock.....	5
Bernard, F. F., Painesville, Ohio.....	75	General nursery stock.....	5
Bertolette, Glenn, Columbiana, Ohio.....	280	Small fruit plants.....	2
Berry's Nursery, P. D. Berry, Dayton, Ohio.....	86	Small fruit plants.....	40
Betcher, C., Canal Dover, Ohio.....	162	General nursery stock.....	1
Betz & Co., W. A., Bedford, Ohio.....	150	General nursery stock.....	2 1/2
Biddle Bros., Mallet Creek, Ohio.....	206	General nursery stock.....	1/2

Binnig, F. W., Painesville, Ohio.....	157	Small fruit plants.....	3½
Birch, J. B., Carrollton, Ohio.....	152	General nursery stock.....	5
Black, R. J., Black's Nursery, Bremen, Ohio.....	260	General nursery stock.....	5
Blackmore, G. W., Perry, Ohio.....	186	General nursery stock.....	5
Botkin, S. C., New Carlisle, Ohio.....	106	Small fruit plants.....	4
Bowling, W. A., Lisbon, Ohio.....	89	Small fruit plants.....	4
Brainard, O. E., Perry, Ohio.....	31	General nursery stock.....	5
Brandt, L. M., Miamisburg, Ohio, R. 2.....	146	Small fruit plants.....	4½
Brewster, E. M., Perry, Ohio.....	145	Small fruit plants.....	5
Brown, T. G., Tiffin, Ohio.....	246	Small fruit trees.....	2
Brown, H. C., Yellow Springs, Ohio.....	189	Ornamentals.....	3
Brown, Chas. C., Cardington, Ohio.....	286	Small fruit plants.....	1
Buechley, E. M., Greenville, Ohio, R. 8.....	165	General nursery stock.....	5
Bull & Brady, St. Paris, Ohio.....	41	General nursery stock.....	3
Burkholder, H., Clyde, Ohio.....	285	General nursery stock.....	½
Burton, J. S., Castown, Ohio.....	15	General nursery stock.....	4
Buskirk Bros., Independence, Ohio.....	163	General nursery stock.....	28
Cain, James G., Marietta, Ohio.....	235	General nursery stock.....	1
Call, S. W., Perry, Ohio.....	52	General nursery stock.....	75
Cannon, Ashbury, Sallito, Ohio.....	212	Small fruit plants.....	1
Carr, L. W., Lakewood, Ohio.....	270	General nursery stock.....	1
Carr's Sons, L. M., Yellow Springs, Ohio.....	181	General nursery stock.....	15
Cartwright, I. D., Toledo, Ohio.....	4	Ornamentals.....	½
Champion & Son, H. J., Perry, Ohio.....	53	General nursery stock.....	50
Child Bros., Perry, Ohio.....	266	Small fruit plants.....	3
Christian, C. H., & Son, Perry, Ohio.....	204	General nursery stock.....	8
Coale, Wm. L., Warren, Ohio.....	237	General nursery stock.....	6
Cogshall, J. E., Little Hocking, Ohio.....	25	Small fruit plants.....	1
Cole, W. B., Painesville, Ohio.....	99	General nursery stock.....	125
Cook, F. R., Lexington, Ohio.....	139	Small fruits.....	3
Cope Bros., Salem, Ohio.....	205	General nursery stock.....	8
Cope, Eliphas, Rogers, Ohio.....	185	General nursery stock.....	8
Cowen, Ellsworth, Barnesville, Ohio.....	43	Small fruits.....	20
Cowen, Ross, Xenia, Ohio, R. 9.....	77	Small fruit plants.....	4½
Cox, E. G., Proctorville, Ohio.....	104	Fruit trees.....	1½
Cramer, Charles O., Mt. Cory, Ohio.....	158	Small fruit plants.....	1½
Crawford, M. Co., Cuyahoga Falls, Ohio.....	110	Small fruit plants.....	5
Crow, Harry S., Dayton, Ohio, R. 13.....	217	Fruit trees.....	2
Cushman Gladiolus Co., Sylvania, Ohio.....	10	Ornamentals.....	½
Davis, Zack, & Co., Delaware, Ohio.....	103	General nursery stock.....	2

LIST OF OHIO NURSERYMEN—Continued.

Name and Address of Owner and Nursery.	Certificate No.	Acres of Stock
Day, H. S., Fremont, Ohio., Fremont Nursery	118	General nursery stock
Dubois, Wilbur, Madisonville, Ohio	46	General nursery stock
Dysinger & Son, Wm., Tippecanoe City, Ohio	239	General nursery stock
Earhart, Wm. H., Lexington, Ohio	282	General nursery stock
Ernst, Charles, Moscow Nurseries, Moscow, Ohio	58	General nursery stock
Ernst, C. J., Perry, Ohio	19	Small fruit plants
Everett, E. H., Co., Toboso, Ohio	241	General nursery stock
Farmers Nursery Co., Troy, Ohio	50	General nursery stock
Farnsworth, W. W., Waterville, Ohio	70	Small fruit plants
Fauver, Irving C., West Dover, Ohio	2	Small fruit plants
Finney, T. T., Millersburg, Ohio	225	General nursery stock
Fogle, O. P., Cambridge, Ohio	151	Small fruit plants
Ford Seed Co., Ravenna, Ohio	120	General nursery stock
Fox, John, & Son, Covington, Ohio	223	General nursery stock
Franklin, J. M., Coolville, Ohio	55	Fruit trees
Freeman, Frank E., Phoneton, Ohio	22	Fruit trees
French Nursery, Clyde, Ohio	23	General nursery stock
Fretz, Arthur, Canal Dover, Ohio	216	Small fruit plants
Fries, Charles, Lakewood, Ohio	87	General nursery stock
Friesner, J. D., Lancaster, Ohio	137	General nursery stock
Gable, Henry P., West Salem, Ohio	273	Small fruits
Gessaman, S. G., Phoneton, Ohio	117	Fruit trees
Gillett, S. B., Kent, Ohio	195	Small fruits
Goode & Reese Co., Springfield, Ohio	1	Ornamentals
Green & Son, L., Co., Perry, Ohio	170	General nursery stock
Green, F. E., Toledo, Ohio	233	Fruit trees
Greider, John, Brandt, Ohio	143	Small fruit plants
Groves, T. H., Barnesville, Ohio	68	Small fruit plants
Guyann, Ellis, Newtown, Ohio	51	Small fruit plants
Hacker, R. A., Painesville, Ohio	5	General nursery stock
Hall, O. J., Zanesville, Ohio, R. 8	32	Ornamental stock
Harmon & Son, M. O., Prospect, Ohio	275	Ornamental stock
	192	Small fruit plants
		20
		1½
		5
		½
		30
		2½
		2
		41
		4
		2
		5
		4
		3
		2½
		1
		5
		48½
		2½
		7
		5
		1
		3
		½
		4
		9
		5
		3
		2½
		3
		1
		1

Harter Leander, Copley, Ohio.....	102	Small fruit plants.....	1
Hathaway, Wick, Madison, Ohio.....	121	Small fruit plants.....	28
Haverland, B. H., Mt. Healthy, Ohio.....	116	Small fruit plants.....	3
Heade & Zinck, Brandt, Ohio.....	140	Fruit trees.....	2½
Heffner, J. W., Hefner Nursery, Tippecanoe City, Ohio, R. D.....	184	Fruit trees.....	3
Henin, Geo., Sidney, Ohio.....	129	Ornamentals.....	½
Hess, R., Akron, Ohio.....	114	General nursery stock.....	9
Hiestand, H. J., Rossburg, Ohio.....	263	Small fruits.....	8½
Hinds, G. W., Kent, Ohio.....	283	Small fruits.....	2½
Hoffman, C. W., Dayton, Ohio, R. 13.....	190	Small fruits.....	3
Hoke, H. B., New Carlisle, Ohio.....	156	Small fruits.....	2
Horvath, M. H., Mentor Nursery, Cleveland, Ohio.....	66	General nursery stock.....	—
Hunkler, Wm. A., Barnesville, Ohio.....	91	Small fruit plants.....	4½
Huntley, Frank, Vinton, Ohio.....	61	Small fruit plants.....	3
Huntington, R. E., Painesville, Ohio.....	34	Ornamentals.....	4
Hutchinson, Fred, Clyde, Ohio.....	11	Small fruits.....	4
Imlay, John D., Zanesville, Ohio.....	180	Ornamentals.....	1
Jenkins & Son, J. J., Winona, Ohio.....	115	General nursery stock.....	20
Joiner, W. W., Perry, Ohio.....	209	Fruit trees.....	209
Jolliffe, C. W., Painesville, Ohio.....	226	Fruit trees.....	226
Kaiser, Fred, & Son, Athalia, Ohio.....	56	Fruit trees.....	4
Kennedy, Wade, B., Langsville, Ohio.....	12	Small fruits.....	1
Kerr, W. B., Big Prairie, Ohio.....	207	Small fruits.....	4½
King, Frank, New Carlisle, Ohio, R. D.....	17	Small fruits.....	2½
Kinsey, Wm. N., Clayton, Ohio.....	144	Ornamentals.....	2
Kissel, A., Greenville, Ohio.....	265	Small fruits.....	1
Kitts, Willard, Proctorville, Ohio.....	187	General nursery stock.....	1
Klingensmith, David, Washingtonville, Ohio.....	45	Small fruits.....	2½
Knauf, Frank, Canfield, Ohio.....	257	General nursery stock.....	2
Knopp, A. B., Columbiana, Ohio.....	88	Small fruits.....	5
Knopp, N. H., Washingtonville, Ohio, R. 1.....	278	Small fruits.....	2
Kohankie & Son, H., Painesville, Ohio.....	44	General nursery stock.....	85
Kohankie, Julius, Painesville, Ohio.....	107	Ornamentals.....	4
Kohankie, Martin, Painesville, Ohio.....	65	Ornamental.....	8
Kolthoff, Fred, Norwood, Ohio.....	274	Ornamental.....	—
Kreitzer, I. H., & Sons, Phoneton, Ohio.....	21	Fruit trees.....	1½
Kuth, J. S., New Paris, Ohio.....	250	Small fruits.....	5
Lampe, G. R., Pt. Clinton, Ohio.....	113	Small fruits.....	1
Law, H. E., Delaware, Ohio, R. 7.....	97	Fruit trees.....	3
Lear, James H., Coshocton, Ohio.....	253	Small fruits.....	2½
		General nursery stock.....	—

LIST OF OHIO NURSEYMEN—Continued.

Name and Address of Owner and Nursery.	Certificate No.	Kind of Stock.	Acres of Stock
Leatherman, Charles E., Wadsworth, Ohio.....	95	Small fruits.....	1
Leedle Floral Co., Springfield, Ohio.....	26	Ornamentals.....	50
Leonard, A. M., Piqua, Ohio.....	74	Ornamentals.....	1½
Lewis, H. W., Bidwell, Ohio.....	276	General nursery stock.....	12
Livingston Seed Co., Columbus, Ohio.....	203	General nursery stock.....	1
Lockwood, E. A., Perry, Ohio, R. 1.....	283	Small fruits.....	1½
Lower, Isaiah, Barberton, Ohio.....	124	General nursery stock.....	5
Lynn, E. E., Salesville, Ohio.....	166	General nursery stock.....	3
Lynn, James L., Barnesville, Ohio, R. 3.....	147	Small fruit plants.....	2½
Marshall, W. D., Franklin Square, Ohio.....	201	Small fruit plants.....	1½
Martin, A. S., Ravenna, Ohio.....	268	Small fruits.....	148
Martin, W. R., Horatio, Ohio.....	148	General nursery stock.....	1
McBeth, Thos. A., Springfield, Ohio.....	173	Ornamentals.....	2
McCullough, J. W., Sons, Cincinnati, Ohio.....	182	General nursery stock.....	1
McDaniel, J. V., McConnellsville, Ohio.....	168	General nursery stock.....	2
McGregor Bros. Co., Springfield, Ohio.....	29	Ornamentals.....	4
McKee, E. C., Athens, Ohio, R. 6.....	245	Small fruits.....	1½
McNary, T. W., Cambridge, Ohio, R. 10.....	196	General nursery stock.....	1½
McQueen, Jacob, Baltic, Ohio.....	249	Small fruits.....	1½
McVitty, James, Perry, Ohio.....	227	Fruit trees.....	5
Mellen, George H., Co., Springfield, Ohio.....	28	Ornamentals.....	½
Merriman & Salkeld, Perry, Ohio.....	219	Fruit trees.....	10
Miami Valley Nurseries, Tippecanoe City, Ohio.....	7	Ornamentals.....	2
Miller, D. J., Millersburg, Ohio.....	178	Small fruit plants.....	2½
Miller, George G., Dayton, Ohio, R. 3.....	224	Ornamental.....	1
Miller, L. A., Perry, Ohio.....	251	Small fruits.....	2
Miller, John F., White Oak, Ohio.....	255	Small fruits.....	1
Mitchell & Son, W. T., Beverly, Ohio.....	136	General nursery stock.....	27
Molden, John, Barnesville, Ohio.....	138	Small fruits.....	3
Mooney, E. K., Madeira, Ohio.....	37	General nursery stock.....	5
Moore, S. R., Zanesville, Ohio.....	172	General nursery stock.....	7
Morrison, Joseph, Cadiz, Ohio.....	210	Fruit trees.....	1

Morris & Westfall, Point Rock, Ohio	49	Small fruits	5
Muchmore, W. O., Fremont, Ohio	81	Ornamentals	5
Murphy, E. N., West Rushville, Ohio	215	Small fruits	4
Muselman, W. L., New Carlisle, Ohio	27	Small fruits	12
Naylor, H. S., Beloit, Ohio	234	Small fruits	3
Nichols & Son, W. H., Painesville, Ohio	133	Ornamentals	5
Noland, G. T., Trimway, Ohio, R. D.	193	General nursery stock	4½
Noland, J. A., East Akron, Ohio, R. 22	125	Small fruits	2
Norman, Painesville, Ohio	23	Ornamentals	12
Norton, H. G., Perry, Ohio	13	General nursery stock	5
Ohio Orchard Co., Milford Center, Ohio	141	Small fruits	5
Osborn, C. L., Sidney, Ohio	169	Ornamentals	1
Parsons, G. T., Phoneton, Ohio	183	Fruit trees	1
Peck, John, Perry, Ohio	35	Small fruits	1½
Pickett & Son, G. S., Clyde, Ohio	24	General nursery stock	40
Platner, D. W., Howard, Ohio	281	Small fruit plants	4
Plummer, D. P., Bellefontaine, Ohio	109	General nursery stock	4
Poe, G. H., Kenton, Ohio	174	Grape Vines	1½
Post & Cummings, Painesville, Ohio	131	Ornamental	1
Postlethwait, Shelby, Barnesville, Ohio	63	Small fruits	15
Quirk, B. F., Geneva, Ohio, R. 2	231	Small fruits	1
Rathburn, Bert, Clyde, Ohio	194	Small fruits	3
Reeves, E. A., Fairmount, Ohio	127	General nursery stock	4
Reichman, Jacob, Barnesville, Ohio	259	Small fruits	2
Reliable Nursery, Norwalk, Ohio	13	Small fruits	1
Resler, M. O., Lima, Ohio	188	Small fruits	4
Rhodes, H. H., Painesville, Ohio	108	Fruit trees	½
Riddle & Peterson, Piqua, Ohio, R. D.	8	General nursery stock	2
Riley, J. N., Washington C. H., Ohio	197	General nursery stock	11
Rogers, H. C., Mechanicsburg, Ohio	5	Ornamental	20
Rossmann, H., Vermillion, Ohio	229	Small fruits	4
Ross, E. H., Johnstown, Ohio	211	Small fruits	½
Roush, Eph., Lima, Ohio, R. 8	198	General nursery stock	4
Rowland, W. W., Perry, Ohio	264	Small fruits	5
Rucker, A. S., Madison, Ohio	79	Small fruits	6
Rueb, A., & Son, Chillicothe, Ohio	164	General nursery stock	3
Sage, F. O., Perry, Ohio	248	General nursery stock	2
Sanders, W. H., Doylestown, Ohio, R. 1	105	Fruit trees	1
Sawyer, Frank, Norwalk, Ohio	222	Small fruits	1
Scarff, W. N., New Carlisle, Ohio	60	Fruit trees and ornamentals	100
		General nursery stock	

LIST OF OHIO NURSERYMEN—Concluded.

Name and Address of Owner and Nursery.	Certificate No.	Kind of Stock.	Acres of Stock.
Schmidt & Botley, Springfield, Ohio.....	57	General nursery stock.....	3
Shaffer, J. B., Cridersville, Ohio.....	202	General nursery stock.....	3½
Siebenhäler, John, Dayton, Ohio.....	135	Small fruits.....	10
Simonton, J. A., Ashland, Ohio.....	122	Small fruits.....	4
Slanker, W. S., Brandt, Ohio.....	258	General nursery stock.....	---
Snyder, H. M., Carey, Ohio, R. 3.....	236	Small fruits.....	3
Spring Hill Nursery, P. Bohlender & Son, Tippecanoe City, Ohio.....	6	General nursery stock.....	30
Stackhouse, S. W., North Georgetown, Ohio.....	177	Small fruits.....	13
Starbuck, Addison, Colerain, Ohio.....	279	General nursery stock.....	5
Stephens, A. P., Perry, Ohio.....	240	General nursery stock.....	15
Stephens, M. A., Perry, Ohio.....	230	General nursery stock.....	4
Stevens & Son, Rutland, Ohio.....	64	Small fruits.....	2½
Stine & Speed, Zanesville, Ohio.....	171	Ornamental and fruit trees.....	3
Storrs & Harrison, Painesville, Ohio.....	9	General nursery stock.....	600
Swart, G. J., Wauson, Ohio.....	254	Small fruit plants.....	3
Sweet, G. N., Perry, Ohio.....	247	General nursery stock.....	3
Tector & Son, Fremont, Bellville, Ohio, R. 3.....	72	Small fruits.....	1½
Tingley, C. B., & Son, Mansfield, Ohio.....	123	Small fruits.....	1½
Tompkins, C. L., Lakewood, Ohio.....	199	General nursery stock.....	2
Townsend, Daniel, Manker, Ohio.....	119	Small fruits.....	2½
Towell, J. C., Painesville, Ohio.....	242	General nursery stock.....	4
Turner, J. A., & Co., Dexter, Ohio.....	62	Small fruits.....	4½
Uhrig, Leonard, Dayton, Ohio.....	155	Ornamentals.....	---
Uhrig, Peter, New Carlisle, Ohio.....	76	General nursery stock.....	7
Ullery, Harry, Dayton, Ohio, R. 13.....	130	Small fruits.....	1½
Van Driest, P. M., East Cleveland, Ohio.....	228	General nursery stock.....	5
Vandervoort & Son, J. M., Wilmington, Ohio.....	161	General nursery stock.....	25
Veley, Alva, Delaware, Ohio.....	232	Small fruits.....	5
Vizard James A., Perry, Ohio.....	244	Small fruits.....	2
Wagner, B. P., Wagner Park Conservatory, Sidney, Ohio.....	167	General nursery stock.....	50
Walburn, Thomas J., & Co., Carpenter, Ohio.....	111	Fruit trees.....	4
Watkins, E. D., Delta, Ohio, R. 29.....	153	Small fruits.....	3

Webster, D. D., Portland, Ohio.....	256	General nursery stock.....	1
Welch, Mark, Painesville, Ohio.....	126	General nursery stock.....	40
Wellman, Geo., New Knoxville, Ohio.....	220	General nursery stock.....	3
Weltz's Sons, Leo, Wilmington, Ohio.....	78	Shrubs ornamentals.....	5
Werner, John, Jr., Middleport, Ohio.....	179	Small fruits.....	4½
Werner Bros., Painesville, Ohio.....	39	Ornamentals.....	½
West Bros., Damascus, Ohio.....	213	General nursery stock.....	80
West, C. O., Perry, Ohio.....	269	Small fruits.....	4
West, T. B., Perry, Ohio.....	73	General nursery stock.....	80
Wetzel Bros., Painesville, Ohio.....	128	General nursery stock.....	5
Whipple, I. O., Madison, Ohio.....	271	Small fruits.....	2
Wilchaste Nursery Co., Geneva, Ohio.....	261	General nursery stock.....	3
Wilson, F. D., Geneva, Ohio R. 4.....	267	Small fruits.....	2
Wilson, George, Marysville, Ohio.....	40	General nursery stock.....	3
Wittman, H. H., New Paris, Ohio.....	100	Small fruits and shade.....	3
Wood, Ed., Weston, Ohio.....	47	Small fruits.....	3
Woodward, J. T., Cambridge, Ohio, R. 9.....	94	Small fruits.....	1½
Wooster Nursery Co., Wooster, Ohio.....	176	General nursery stock.....	10
Worman, Frank J., Co., Troy, Ohio.....	30	Shrubs ornamentals.....	½
Wright, C. C., Clyde, Ohio.....	154	Small fruits.....	3
Wyss, Daniel, New Philadelphia, Ohio.....	175	General nursery stock.....	4
Xenia Star Nursery, Xenia, Ohio.....	83	General nursery stock.....	140
Zeigenfelder, James B., Troy, Ohio.....	59	Small fruits.....	3½
Zettler, Company, The, Canton, Ohio.....	218	General nursery stock.....	2½

LIST OF CERTIFIED AGENTS.

1912.

Name of Agent.	Cert. No.	Name and Address of Nursery Represented.
Adams, T. B.	133	Akron Nursery, Akron, Ohio.
Alspach, Ervin E.	144	Wm. C. Moore & Co., Newark, N. Y.
Anson, George H.	156	J. M. Vandervoort & Son, New Antioch, Ohio.
Armstrong, J. H.	51	Farmers Nursery Co., Troy, Ohio.
Barhite, B. G.	160	W. N. Scarff, New Carlisle, Ohio.
Barhite, Nellie E.	97	D. C. & B. G. Barhite, Wauseon, Ohio.
Barnes, P. N.	92	G. S. Prickett & Son, Clyde, Ohio.
Bastard, J. H.	158	H. S. Day, Fremont, Ohio.
Bauman, Leonard C.	221	Western N. Y. Co., Rochester, N. Y.
Beckner, Horace G.	125	Penn. Nur. & Orch. Co., Greenfield, Ind.
Bedford, M. T.	35	I. E. Ilgenfritz Sons Co., Monroe, Mich.
Bennett, Wm. G.	70	Baird & Brady, Troy, Ohio.
Bigler, S. W.	137	Stark Bros., Louisiana, Mo.
Binkley, D. D.	44	I. E. Ilgenfritz Sons, Monroe, Mich.
Bishop, J. H.	142	Xenia Star Nursery, Xenia, Ohio.
Black, F. L.	134	Knight & Bostwick, Newark, N. Y.
Black, P. F.	112	E. C. Morley, Youngstown, Ohio.
Blain, Oren.	172	R. G. Chase & Co., Geneva, N. Y.
Bossler, Elmer.	52	Ilgenfritz & Sons, Monroe, Mich.
Bowen, L. G.	132	Knight & Bostwick, Newark, N. Y.
Bowman, W. C.	169	Wm. C. Moore & Co., Newark, N. Y.
Boyer, Joseph.	178	C. W. Stuart & Co., Newark, N. Y.
Brady, E. J.	138	Knight & Bostwick, Newark, N. Y.
Brady, J. T.	185.	Knight & Bostwick, Newark, N. Y.
Bedford, J. W.	119	Stark Bros., Louisiana, Mo.
Bragunier, J. C.	131	Hilltop Nursery, Castown, Ohio.
Bridge, Reuben.	79	Lapointe Nur. Co., Geneva, N. Y.
Broderson, B. L.	18	Greening Nursery Co., Monroe, Mich.
Brower, W. H.	55	Miami Valley Nur. Co., Tippicanoe City, Ohio.
Brower, D. L.	82	Hawks Nursery, Rochester, N. Y.
Budd, John.	1	Michigan Nursery, Monroe, Mich.
Buker, Alpha.	121	Stark Bros., Louisiana, Mo.
Bush, W. D.	111	Western N. Y. Nur. Co., Rochester, N. Y.
Bushman, D. W.	140	Wm. C. Moore Co., Newark, N. Y.
Cable, Mary E. S.	37	Pennsylvania Nursery Co., Girard, Pa.
Calvert, S. M.	114	G. S. Pickett & Son, Clyde, Ohio.
Campbell, Joshua.	201	Wm. J. Reilly, Danville, N. Y.
Caplinger, H. C.	107	J. M. Vandervoort & Son, Wilmington, Ohio.
Carrell, G. W.	147	Greening Nursery Co., Monroe, Mich.
Chaffee, C. C.	19	Farmers Nursery Co., Troy, Ohio.
Clements, W. H.	188	Stark Bros. Nur. & Orch. Co., Louisiana, Mo.
Conley, R. W.	103	Penn. Nur. Co., Girard, Pa.
Cooperrider, J. A.	202	A. B. French Nur. Co., Clyde, Ohio.
Cox, C. H.	208	A. B. French, Clyde, Ohio.
Crawley, John C.	110	C. L. Van Inwagen, Newark, N. Y.
Cretcher, J. W. B.	155	Lapointe Nur. Co., Geneva, N. Y.
Creveston, Frank E.	53	Farmers Nur. Co., Troy, Ohio.
Crow, A. E.	27	Stark Bros., Louisiana, Mo.
Currier, E. S.	195	Knight & Bostwick, Newark, N. Y.
Darby, Sylvester.	187	W. T. Mitchell & Son, Beverly, Ohio.
Daugherty, H. B.	29	M. H. Harmon Co., Geneva, N. Y.
Davy, Ezra J.	116	G. S. Pickett & Son, Clyde, Ohio.
Dean, Wm. S.	104	Western N. Y. Nur. Co., Rochester, N. Y.
Dellinger, Frank E.	130	Spring Hill Nur., Tippicanoe City, Ohio.
Dellinger, W. M.	179	H. S. Day, Fremont, Ohio.
Denney, O. L.	117	Gold Nursery, Mason City, W. Va.

LIST OF CERTIFIED AGENTS 1912—Continued.

Name of Agent.	Cert. No.	Name and Address of Nursery Represente
Deyo, B. W.....	159	H. S. Day, Fremont, Ohio.
Doll, F. J.....	135	Knight & Bostwick, Newark, N. Y.
Donahey, P. N.....	88	Stark Bros. Nur. Co., Louisiana, Mo.
Dorr, Arthur D.....	215	Stark Bros., Louisiana, Mo.
Edgar, M. W.....	66	Chase Nurseries, Geneva, N. Y.
Eikenberry, Ed.....	145	Stark Bros. Nur. & Orch. Co., Louisiana, Mo.
Emrick, I. E.....	34	Salem Nurseries, Clayton, Ohio.
Fackler, P. H.....	13	I. E. Ilgenfritz Sons, Monroe, Mich.
Fink, W. M.....	174	G. S. Pickett & Son, Clyde, Ohio.
Fink, H. T.....	209	M. H. Harmon Co., Geneva, N. Y.
Finifrock, A. A.....	194	French Nursery, Clyde, Ohio.
Fisher, B. F.....	206	Farmers Nursery Co., Troy, Ohio.
Flater, Henry.....	67	Fremont Nursery Co., Fremont, Ohio.
Ford, M. O.....	15	I. E. Ilgenfritz Sons, Monroe, Mich.
Foster, Elmer E.....	153	M. H. Harmon, Geneva, N. Y.
Fraas, W. T.....	186	A. B. French, Clyde, Ohio.
Frazier, D. P.....	86	Eureka Nurseries, Troy, Ohio.
Friedley, A. M.....	122	G. S. Pickett & Son, Clyde, Ohio.
Frohn, A. C.....	41	Spring Hill Nursery, Tippecanoe City, Ohio.
Frye, Geo. F.....	12	I. E. Ilgenfritz Sons, Monroe, Mich.
Gander, S. W.....	101	Wm. C. Moore & Co., Newark, N. Y.
Garber, S. D.....	36	Penn. Nursery Co., Girard, Pa.
Garman, J. W.....	21	J. M. Vandervoort & Son, Wilmington, Ohio.
Geiger, A. W.....	47	The Greening Nur. Co., Monroe, Mich.
Gerber, G. J.....	63	Greening Nursery Co., Monroe, Mich.
Gessaman, S. G.....	115	W. G. Gessaman, Tippecanoe City, Ohio.
Gheen, G. W.....	220	Knight & Bostwick, Newark, N. Y.
Gilbert, A. O.....	93	Western N. Y. Nursery, Rochester, N. Y.
Glasgow, S. G.....	173	J. M. Vandervoort & Son, Wilmington, Ohio.
Graham, C. C.....	106	W. T. Mitchell & Son, Beverly, Ohio.
Grote, John.....	191	Knight & Bostwick, Newark, N. Y.
Grulick, C. C.....	161	P. Bohlander & Son, Tippecanoe City, Ohio.
Gump, Nicholas.....	61	Wm. C. Moore & Co., Newark, N. Y.
Haffey, J. J.....	152	M. H. Harmon, Geneva, N. Y.
Hagarty, Daniel.....	54	Wm. T. Mitchell, Beverly, Ohio.
Hampton, E. N.....	199	Gold Nursery Co., Mason, W. Va.
Hanan, H. V.....	232	H. S. Day, Fremont, Ohio.
Hartman, Samuel C.....	24	Perry Nursery Co., Rochester, N. Y.
Hartman, I. L.....	84	French Nursery, Clyde, Ohio.
Hathaway, P. M.....	57	Clark Nursery, Waterloo, N. Y.
Hauer, Michael.....	60	M. Barnes & Co., Mt. Healthy, Ohio.
Haughey, Thos. E.....	108	Rice Bros., Geneva, N. Y.
Haworth, Orin.....	89	E. M. Buechley, Greenville, Ohio.
Heskett, M. V.....	177	G. S. Pickett & Son, Clyde, Ohio.
Hill, George C.....	212	I. E. Ilgenfritz Sons, Monroe, Mich.
Hoag, Adam.....	83	French Nursery Co., Clyde, Ohio.
Hoffman, J. C.....	39	Saddler Bros., Bloomington, Ill.
Holloway, David.....	219	Stark Bros. Nur. Co., Louisiana, Mo.
Hoover, C. F.....	190	P. Bohlander & Son, Tippecanoe City, Ohio.
Hopkins, R. E.....	231	Western N. Y. Nur. Co., Rochester, N. Y.
Hopkins, E. L.....	75	G. S. Pickett, Clyde, Ohio.
Houts, Wm.....	211	Rice Bros., Geneva, N. Y.
Hummel, Wm.....	46	Clyde Nursery, Clyde, Ohio.
Hunt, James.....	95	Brown Bros. & Co., Rochester, N. Y.
Huttinger, Albert.....	40	I. E. Ilgenfritz Sons Co., Monroe, Mich.
Jamison, Mrs. M. M.....	96	Fairview Nur., Rochester, N. Y.
Jones, John B.....	171	Penn. Nur. Co., Girard, Pa.
Kahler, J. F.....	166	Stark Bros., Louisiana, Mo.
Kammel, H.....	200	G. S. Pickett, Clyde, Ohio.

LIST OF CERTIFIED AGENTS 1912—Continued.

Name of Agent.	Cert. No.	Name and Address of Nursery Represented.
Kauth, Peter	165	Wm. C. Moore Co., Newark, Ohio.
Kennedy, O. P.	184	Kalamazoo Nursery, Kalamazoo, Mich.
Kepler, H. B.	2	Miami Valley Nursery, Tippecanoe City, Ohio.
King, John	126	Western New York Nur. Co., Rochester, N. Y.
Kingley, L. C.	150	A. B. French, Clyde, Ohio.
Kirk, W. E.	123	Stark Bros., Louisiana, Mo.
Knight, C. L.	20	Greening Nur. Co., Monroe, Mich.
Knox, John	189	Stark Bros., Louisiana, Mo.
Kohl, P. P.	128	G. S. Pickett, Clyde, Ohio.
Kopf, G. N.	154	John Siebenthaler Nur., Dayton, Ohio.
Law, William	6	I. E. Ilgenfritz, Monroe, Mich.
Leasure, H. C.	207	Farmers Nur. Co., Troy, Ohio.
Leasure, D.	225	Farmers Nursery Co., Troy, Ohio.
Lehman, Clinton ..	162	John Siebenthaler, Dayton, Ohio.
Lewis, J. B.	98	Western N. Y. Nur. Co., Rochester, N. Y.
Linhard, F. K.	233	Stark Bros., Louisiana, Mo.
Long, Noah, Sr.	204	C. W. Stuart & Co., Newark, N. Y.
Magill, Warren	43	French Nursery, Clyde, Ohio.
Malloy, Mrs. M. K.	157	M. H. Harmon Co., Geneva, N. Y.
Markland, O. H.	149	M. Barnes Co., Cincinnati, Ohio.
Markley, C. A.	203	Greening Nursery Co., Monroe, Mich.
McCabe, Michael L.	58	Barrett & Brady, Troy, Ohio.
McConnell, John	59	Emmons & Co., Newark, N. Y.
McCoy, Wm. C.	109	Stark Bros., Louisiana, Mo.
McKnight, J. R.	87	Greening Nur. Co., Monroe, Mich.
McNary, J. C.	141	Knight & Bostwick, Newark, N. Y.
Miller, John B.	181	Jno. Siebenthaler Nur., Dayton, Ohio.
Miller, I. N.	229	J. M. Vandervoort & Son, New Antioch, Ohio.
Miller, James B.	94	Stark Bros., Louisiana, Mo.
Mills, Chas. J.	42	Salem Nursery, Clayton, Ohio.
Mills, Lloyd	13	French Nursery, Clyde, Ohio.
Mohn, J. E.	9	I. E. Ilgenfritz, Monroe, Mich.
Montgomery, Ida	62	Kalamazoo Nur., Kalamazoo, Mich.
Moore, L. C.	105	Xenia Star Nursery, Xenia, Ohio.
Morrow, J. H.	32	Salem Nursery, Clayton, Ohio.
Moyer, Roy A.	148	Jno. Sieberthaler Nur., Dayton, Ohio.
Mumford, A. R.	14	C. L. Van Inwagen, Newark, N. Y.
Muntzinger, G. F.	33	French Nursery Co., Clyde, Ohio.
Neiswanger, J. L.	196	Knight & Bostwick, Newark, N. Y.
Neuschwander, J. S.	168	Greening Nursery, Monroe, Mich.
Nicholson, W. H., Jr.	183	Stark Bros., Louisiana, Mo.
Noling, James M.	210	Wm. C. Moore Co., Newark, N. Y.
Orme, J. P.	25	Knight & Bostwick, Newark, N. Y.
Paddison, C. C.	170	Wm. C. Moore Co., Newark, N. Y.
Painter, B. F.	224	Farmers Nur. Co., Troy, Ohio.
Perry, F. O.	126	Ilgenfritz Sons, Monroe, Mich.
Perry, Frederick	64	H. S. Day, Fremont, Ohio.
Petty, T. A.	130	Brandywine Nur. Co., Greerfield, Ind.
Pfouts, Lycurgus	7	Greening Nur. Co., Monroe, Mich.
Phillis, Ross	120	J. B. Nellis & Co., Rochester, N. Y.
Pierce, T. C.	214	M. Barnes Co., Cincinnati, Ohio.
Plettner, Henry	127	Farmers Nursery Co., Troy, Ohio.
Plettner, J. W.	28	I. E. Ilgenfritz Sons Co., Monroe, Mich.
Pope, Lewis V.	30	Stark Bros., Louisiana, Mo.
Quinn, John W.	198	Hawks Nur. Co., Rochester, N. Y.
Raby, J. A.	222	Greening Bros., Monroe, Mich.
Ramsey, Lames L.	164	Stark Bros., Louisiana, Mo.
Ramsey, B. C.	193	French Nursery, Clyde, Ohio.
Raub, H. A.	118	C. L. Van Inwagen, Newark, N. Y.

LIST OF CERTIFIED AGENTS 1912—Concluded.

Name of Agent.	Cert. No.	Name and Address of Nursery Represented,
Rau, D. W. C.....	22	Greening Nursery Co., Monroe, Mich.
Reeves, E. B.....	99	J. M. Vandervoort & Son, New Antioch, Ohio.
Renier, O. E.....	234	Greening Nursery Co., Monroe, Mich.
Richmond, W. P.....	4	Jno. Siebenthaler, Dayton, Ohio.
Rice, C. B.....	228	Northwestern Nur. Co., Traverse City, Mich.
Ridgeway, James.....	5	Farmers Nur. Co., Troy, Ohio.
Riegle, L. D.....	11	G. S. Pickett & Son, Clyde, Ohio.
Roads, C. B.....	8	I. E. Ilgenfritz Sons, Monroe, Mich.
Rodhouse, T. F.....	143	G. S. Pickett & Son, Clyde, Ohio.
Ross, C. A.....	218	Northwestern Nur. Co., Traverse City, Mich.
Rowlands, Wm. R.....	48	Chase Nursery Co., Geneva, Ohio.
Rupp, Joseph.....	58	Ilgenfritz Sons, Monroe, Mich.
Schaffer, Henry P.....	227	I. E. Ilgenfritz Sons Co., Monroe, Mich.
Semple, E. P.....	223	E. C. Morley, Youngstown, Ohio.
Siniff, Peter T.....	217	Stark Bros., Louisiana, Mo.
Smith, L. H.....	176	Pennsylvania Nursery Co., Girard, Pa.
Smith, D. J. B.....	38	Saddler Bros., Bloomington, Ill.
Spellman, W. W.....	16	W. T. Mitchell & Son, Beverly, Ohio.
Starry, H. A.....	76	Brown Bros. Co., Rochester, N. Y.
Sternor, James.....	74	J. W. Schuette & Co., St. Louis, Mo.
Stevens, A. E.....	226	Farmers Nursery Co., Troy, Ohio.
Strassell, J. T.....	56	Barnes Nursery, Cincinnati, Ohio.
Sample, L. T.....	69	Xenia Star Nursery, Xenia, Ohio.
Saule, M. F.....	71	L. L. May & Co., St. Paul, Minn.
Saunders, J. P.....	49	Chase Nurseries, Geneva, N. Y.
Sees, George W.....	31	Pennsylvania Nur. Co., Girard, Pa.
Slemmons, G. Bret.....	100	Greening Nursery Co., Monroe, Mich.
Smith, Michael.....	73	H. S. Day, Fremont, Ohio.
South, A. G.....	197	Stark Bros., Louisiana, Mo.
Spitler, Levi.....	230	C. W. Stuart & Co., Newark, N. Y.
Strausbaugh, Jos.....	26	G. S. Pickett & Son, Clyde, Ohio.
Strous, Wm. A., Sr.....	72	Chase Nursery, Geneva, N. Y.
Switzer, S.....	175	Knight & Bostwick, Newark, N. Y.
Tanruther, J. W.....	90	Wm. C. Moore & Co., Newark, N. Y.
Thompson, Michael.....	80	Baird & Brady, Troy, Ohio.
Timmons, A. L.....	235	Wm. C. Moore Co., Newark, N. Y.
Trainer, W. C.....	163	Gold Nursery, Mason City, W. Va.
Trainer, Mathew.....	167	Gold Nursery, Mason City, W. Va.
Trout, John.....	77	John Siebenthaler, Dayton, Ohio.
Ulmer, L.....	129	Knight & Bostwick, Newark, N. Y.
Vernon, George.....	91	Brown Bros. Co., Rochester, N. Y.
Vowels, George W.....	216	H. J. Champion, Perry, Ohio.
Ward, C. R.....	102	Wm. C. Moore & Co., Newark, N. Y.
Wasson, Herman.....	205	Baird & Brady, Troy, Ohio.
Waugh, A. L.....	180	Stark Bros. Nur. & Orch. Co., Louisiana, Mo.
Wead, W. R.....	146	Wm. C. Moore Co., Newark, Ohio.
Weeks, C. W.....	236	C. W. Stuart Co., Newark, N. Y.
Whightman, O. L.....	78	Wm. C. Moore Co., Newark, N. Y.
White, G. H.....	151	French Nursery, Clyde, Ohio.
Whitley, R. L.....	124	J. M. Vandervoort & Son, Wilmington, Ohio.
Wiese, John.....	17	G. S. Pickett & Son, Clyde, Ohio.
Wilber, J. A.....	23	I. E. Ilgenfritz, Monroe, Mich.
Wilson, M. D.....	213	Northwestern Nur. Co., Traverse City, Mich.
Wilson, Allen.....	113	Stark, Bros., Louisiana, Mo.
Wineha, Chas.....	45	Gold Nursery Co., Mason, W. Va.
Wright, D. R.....	13	Portland Nursery, Portland, Ind.
Young, J. H.....	182	C. M. Hobbs & Son, Bridgeport, Ind.
Younce, D. M.....	85	Eureka Nursery, Troy, Ohio.
Zeiters, David H.....	192	I. E. Ilgenfritz, Monroe, Mich.
Zerck, Chas. J.....	13	G. B. West, Perry, Ohio.

LIST OF CERTIFIED DEALERS.

1912.

Name of Dealer.	Cert. No.	Name and Address of Nursery Represented.
Beggs, D. C. Co.....	30	J. W. Parker & Son, Troy, Ohio.
Berkshire, L. W.....	23	{ Baird & Brady, Troy, Ohio. Farmers Nursery Co., Troy, Ohio. Storrs & Harrison, Painesville, Ohio.
Biehl, Henry J.....	25	{ H. S. Day, Fremont, Ohio. Ornamental Nur. Co., Painesville, Ohio.
Bloom, S. R.....	31	Storrs & Harrison, Painesville, Ohio.
Crider, Oscar B.....	11	
Darling, Irvin C.....	15	Storrs & Harrison Co., Painesville, Ohio.
Devore, John.....	12	W. B. Cole, Painesville, Ohio.
Drake, A. S.....	29	Storrs & Harrison, Painesville, Ohio.
Franklin Park Floral Co..	17	{ Storrs & Harrison Co., Painesville, Ohio. W. B. Cole, Painesville, Ohio.
Frink, W. M.....	16	{ H. Kohankie, Painesville, Ohio. S. W. Call, Perry, Ohio. A. F. Bernard, Painesville, Ohio.
Gettle, Samuel.....	6	{ Storrs & Harrison Co., Painesville, Ohio. W. B. Cole, Painesville, Ohio.
Hastings, H. G. & Co....	33	Good & Reese Co., Springfield, Ohio.
Iverson, Chas. P.....	9	{ Storrs & Harrison, Painesville, Ohio. W. B. Cole, Painesville, Ohio.
Kennedy, Henry J.....	14	{ W. B. Cole, Painesville, Ohio. Storrs & Harrison Co., Painesville, Ohio.
Kintner, J. H.....	2	Storrs & Harrison Co., Painesville, Ohio.
Lannert, George H.....	4	Storrs & Harrison Co., Painesville, Ohio.
Lang, Frank.....	8	Storrs & Harrison Co., Painesville, Ohio.
Litsenberg, Joseph.....	19	{ W. B. Cole, Painesville, Ohio. Good & Reese, Springfield, Ohio.
Love, T. H.....	7	Farmers Nursery Company, Troy, Ohio.
Mershon, M. B.....	26	Storrs & Harrison, Painesville, Ohio.
Morley, Edward C.....	18	{ Storrs & Harrison Co., Painesville, Ohio. Jackson & Perkins.
Oakes, F. C.....	34	{ P. Bohlender & Son, Tippecanoe City, Ohio. W. B. Cole, Painesville, Ohio.
Powell, A. W.....	5	Storrs & Harrison, Painesville, Ohio.
Reid, F. M.....	22	Storrs & Harrison Co., Painesville, Ohio.
Sharp, W. P.....	3	{ T. B. West, Perry, Ohio. Storrs & Harrison Co., Painesville, Ohio.
Shattuck, Edward A.....	13	{ T. B. West, Perry, Ohio. W. N. Scarff, New Carlisle, Ohio.
Shoemaker, A. J.....	28	{ P. Bohlender & Son, Tippecanoe City, Ohio. Storrs & Harrison Co., Painesville, Ohio.
Swain, Nelson & Sons Co..	27	
Underwood Bros.....	32	{ Storrs & Harrison, Painesville, Ohio. Jackson & Perkins, Newark, Ohio.
Walton, W. C.....	21	Storrs & Harrison Co., Painesville, Ohio.
Webb, D. S.....	1	{ Farmers Nursery Company, Troy, Ohio. A. Barnes, Mt. Healthy, Ohio.
Wilder Company.....	10	{ Waldean Nursery, Warsaw, Ky. Good & Reese Co., Springfield, Ohio.
Wright, Thomas L.....	20	{ Xenia Star Nursery, Xenia, Ohio. Storrs & Harrison Co., Painesville, Ohio.

LIST OF OHIO NURSERYMEN HOLDING OFFICIAL CERTIFICATES OF FUMIGATION.

1913.

Name and Address of Owner.	Name of Nursery.	Certificate No.
Allen, W. A., & Sons, Geneva, Ohio	Woodbine Nurseries	1
Baird & Brady, Troy, Ohio		2
Barnes & Son, A., Mt. Healthy, Ohio		3
Barnes & Co., M., Sta. K., Cincinnati, Ohio		4
Barnes, M. F., Hamilton, Ohio		5
Bernard, A. F., Painesville, Ohio		6
Bohlender, Peter, & Sons, Tippecanoe City, Ohio		7
Buechley, N., Clayton, Ohio		8
Call, S. W., Perry, Ohio		9
Carr's, M. L., Sons, Yellow Springs, Ohio		10
Champion & Son, H. J., Perry, Ohio	Rosemont Nursery Spring Hill Nursery	11
Climax Nursery Co., Horatio, Ohio		28
Cole, W. B., Painesville, Ohio		12
Day, H. S., Fremont, Ohio		13
Ernst, Charles, Moscow, Ohio		14
Farmers Nursery Co., Troy, Ohio		15
French Nursery Company, Clyde, Ohio		16
Hacker, R. A., Painesville, Ohio		17
Kohankie & Son, H., Painesville, Ohio		27
Kohankie, Martin, Painesville, Ohio		18
Miami Valley Nursery, Tippecanoe City, Ohio	Lima Nursery	19
Norman, T. R., Painesville, Ohio		26
Pickett & Son, G. S., Clyde, Ohio		20
Poe, G. H., Kenton, Ohio		31
Resler, M. O., Lima, Ohio		21
Scarff, W. N., New Carlisle, Ohio		22
Storrs & Harrison, Painesville, Ohio		23
Wagner Park Conservatory, Sidney, Ohio		29
West, T. B., Perry, Ohio		24
Xenia Star Nursery, Xenia, Ohio		25

**SUPPLEMENTARY LIST OF OHIO NURSERYMEN, AGENTS AND DEALERS RECEIVED TOO LATE
FOR CLASSIFICATION.**

Name and Address of Owner and Nursery.	Certificate No.	Kind of Stock.	Acres of Stock.
Armstrong, R. W., Elkton, Ohio.....	291	Small fruit plants.....	4
Bailey Bros., Hubbard, Ohio, R. 3.....	303	Small fruit plants.....	8
Billings, Chas., Cuyahoga Falls, Ohio.....	309	Small fruit plants.....	2½
Carson Bros., Middleport, Ohio.....	306	Apple and small fruit.....	4½
Carter, W. L., Rogers, Ohio, R. 1.....	288	Small fruit plants.....	3
Conway, J. E. & J. A., Bond, Winterset, Ohio, R. 1.....	293	Small fruits.....	4½
Dewitt, F. H., Wooster, Ohio.....	280	Greenhouse stock.....	2
Eaton, L. D., Proctorville, Ohio.....	289	Small fruits.....	2
Fife, C. E., Cheshire, Ohio.....	298	Small fruits.....	4
George, James A., Cardington, Ohio.....	296	Small fruits.....	1½
Gilky, Chas., Pomeroy, Ohio.....	308	Strawberry plants.....	1
Grimes & Son, W. B., Rutland, Ohio.....	304	Small fruits.....	2
Hanauer & Son, F. J., Dayton, Ohio.....	314	Ornamentals.....	3
Hawkins, W. H., & Son, Kensington, Ohio.....	301	Small fruits.....	5
Jayne, Alfred L., Painesville, Ohio.....	297	General nursery stock.....	4
Moore, A. B., Proctorville, Ohio.....	313	Small fruits.....	4
Mullen, G. H., Andover, Ohio.....	287	Small fruits.....	2
Neal, J. W., South Point, Ohio.....	310	Small fruits.....	3
Perry, Geo. R., Cambridge, Ohio.....	294	Small fruits.....	4
Quaker Hill Nur., W. G. Cope, Beloit, Ohio, R. 1.....	311	Small fruits.....	4½
Skinner, E. M., Perry, Ohio.....	299	Strawberry plants.....	1½
Speck, D. S., Big Prairie, Ohio.....	316	Strawberry plants.....	3
Stoner, Edward, Dayton, Ohio.....	295	Small fruits.....	15
Tall Timber Nursery, S. R. Webster, Armstrong, Ohio.....	302	Roses, grapes, and shrubs.....	1
Templin, L., Seed Co., Calla, Ohio.....	315	Strawberry plants.....	1
Tiverton Nur., Chas. McDonald, Mt. Vernon, Ohio, R. 8.....	305	General nursery stock.....	1
Tucker, Jonathan, Mt. Liberty, Ohio.....	300	Strawberry plants.....	3
West, H. E., Perry, Ohio.....	282	Small fruits.....	2
West, Geo. F., Perry, Ohio.....	317	Strawberries.....	3
Wriker, S., Clyde, Ohio.....	312	Small fruits.....	5
Yost, D. P., Lancaster, Ohio.....	307	General nursery stock.....	2½

AGENTS.

Name of Agent.	Cert. No.	Name and Address of Nursery Represented.
Andrus, G.....	237	Western N. Y. Nur. Co., Rochester, N. Y.
Bolander, John.....	245	G. S. Pickett & Son, Clyde, Ohio.
Brower, G. W.....	245	Knight & Bostwick, Newark, N. Y.
Eifert, Wm. H.....	244	Greening Nur. Co., Monroe, Mich.
Gibson, Jesse J.....	246	Penn. Nur. Co., Girard, Pa.
Guthridge, Chas.....	239	Northwestern Nur. Co., Traverse City, Mich.
Houtz, Jacob H.....	247	Rice Bros., Geneva, N. Y.
Lowry, H. A.....	243	Emmons & Co., Newark, N. Y.
Milner, O. F.....	249	Ilgenfritz Sons Co., Monroe, Mich.
Miller, H. L.....	248	Chase Bros., Rochester, N. Y.
McBride, L. S.....	238	Wm. C. Moore Co., Newark, N. Y.
Noble, Edward.....	251	Storrs & Harrison Co., Painesville, Ohio
Sayre, G. A.....	240	Gold Nursery Co., Mason City, W. Va
Wellbaum, Frank.....	250	Salem Nurseries, Clayton, Ohio.
Young, J. M.....	242	Rice Bros. & Co., Geneva, N. Y.

DEALERS.

Name of Dealer.	Cert. No.	Name and Address of Nursery Represented.
Roberts, H. M.....	34	{ Storrs & Harrison, Painesville, Ohio. Cole Nursery, Painesville, Ohio.
Kresge Company.....	35	{ William D. Burt, Dalton, N. Y. Arcadia Rose Co., Newark, N. Y.
Woolworth Company.....	37	{ Jackson & Perkins, Newark, N. Y. H. S. Taylor, Rochester, N. Y. Ringler Rose Co., Chicago, Ill.
May Company.....	36	{ W. W. Barnard Co., Chicago, Ill. H. S. Taylor, Rochester, N. Y. Arcadia Rose Co., Newark, N. Y. Ohio Nur. & Supply Co., Elyria, Ohio.

THE OHIO STATE BOARD OF AGRICULTURE
Tenth and Eleventh Annual Report
OF THE
State Board of Live Stock Commissioners
1910-1911 == 1911-1912

(817)

THE OHIO STATE BOARD OF AGRICULTURE

TENTH AND ELEVENTH ANNUAL REPORTS

OF THE

State Board of Live Stock Commissioners

1910-1911—1911-1912.

COLUMBUS, OHIO, November 4, 1912.

To His Excellency, JAMES M. COX, Governor of Ohio.

SIR:—The State Board of Live Stock Commissioners has the honor to submit herewith a report of its transactions for the biennial period ending November 4, 1912. This period has been marked by an unprecedented development of a demand, by the people of the State, for modern live stock sanitary work. The Board has endeavored, so far as the means placed at its disposal would permit, to meet this demand. The law provides that the State Board of Agriculture, constituting the Board of Live Stock Commissioners, shall promote and protect the live stock interests of the State and prevent the spread of infectious and contagious diseases among domestic animals. It provides, further, that this Board shall prescribe such rules and regulations not in conflict with law as it may deem necessary to secure strict quarantine and otherwise prevent the spread of, and extirpate, infectious and contagious diseases among the live stock of the State.

With the liberal appropriations made by the General Assembly of 1909 and 1910 this work has, for the first time, been conducted on a scale approaching what might be regarded as commensurate with the great interests at stake. These appropriations have enabled the Board to establish its work on a footing that permits favorable comparison with the best in the land. The establishment of a serum institute for the preparation of hog cholera protective serum under State supervision,

for the purpose of beginning a systematic campaign for the control and eradication of hog cholera, places Ohio in the lead of the world in this phase of live stock sanitary work.

The Board of Live Stock Commissioners has in its employ fifteen veterinarians, graduates of the best school in the United States, the Ohio State University; each is excellently equipped for his particular field of technical or practical work and is ready and anxious to give to the live stock industry of the State the best that is in him.

The bright future of the work entrusted to this Board is at present darkened by but a single cloud—the woeful inadequacy of our present live stock laws, particularly as these apply to the regulation of traffic in diseased animals from other States across our borders, the rigid enforcement of quarantine regulations and the inspection of dangerously diseased animals or herds on Ohio farms.

In submitting the following pages for your approval we trust that the need of better legislation has been made evident, and that you will recommend in your message to the General Assembly the enactment of a modern live stock sanitary law to replace the ineffective statutes now in force.

The scope of the Board's activities embraces the following general divisions:

1. **QUARANTINE WORK**, including:
 - a. The quarantine of herds infected with dangerous infectious and contagious diseases and the disinfection of infected premises.
 - b. The establishment and supervision of unloading stations for Southern or quarantine cattle permitted to be shipped into this state for the purpose of immediate slaughter. Unloading stations for sheep exposed to scabies and for swine exposed to hog cholera, intended for immediate slaughter.
2. **SHIPPING REGULATIONS** for the control of shipments of horses, cattle, sheep and swine into the state, or from place to place within its borders. These regulations are very ineffective on account of inadequate laws for their strict enforcement.
3. **FIELD INVESTIGATIONS OF OUTBREAKS OF INFECTIOUS DISEASES.** This includes investigations of reported outbreaks of such common diseases as glanders, epizootic lymphangitis and mange in horses; tuberculosis, mange and contagious abortion in cattle; tuberculosis and hog cholera in swine; scabies and parasitic worm diseases in sheep; rabies or hydrophobia in dogs and in other domestic animals, and unusual or recently introduced diseases not recognized by the general practicing veterinarian.
4. **PATHOLOGICAL DIAGNOSIS** including:

The laboratory diagnosis of rabies in animals, particularly dogs, and the examination of pathological material collected by the field veterinarians in the employ of the board in their routine duties, as well as the confirmation of diagnoses made by practicing veterinarians.
5. **HOG CHOLERA IMMUNE SERUM PRODUCTION.**

6. THE FIELD APPLICATION OF HOG CHOLERA IMMUNE SERUM for the control of hog cholera.
7. THE PREPARATION OF TUBERCULIN AND MALLEIN for diagnosing tuberculosis in cattle and glanders in horses, and sero-diagnosis of these and other diseases.
8. EXPERIMENTAL INVESTIGATIONS.
 - a. The study of new diseases and
 - b. The search for remedies or preventives for known diseases.
9. EDUCATIONAL WORK.
 - a. State and county fair exhibits—held during the late summer and fall months.
 - b. Lectures at farmers' institutes—held during the winter months. -----
10. EXECUTIVE WORK.

1.

QUARANTINE WORK.

a. *The Quarantine of Herds Infected With Disease.*

The quarantine (with appropriate modifications and in conjunction with the use of disinfectants and preventive and curative agents) of animals or herds affected with dangerous infectious or contagious diseases, is the basis of all successful live stock sanitary work. To be effective, quarantine regulations must be rigid and must be enforced promptly. This is possible only under proper laws. From the peculiar nature of the work it is often necessary to enforce seemingly arbitrary regulations that may cause suffering or loss to the individual in order to save the more valuable property of a community. To carry on such work effectively and with the least opposition it is necessary for officials whose duty it is to enforce such regulations, to be supported by wise and just laws, and aided by necessary funds not only to defray expenses of actual work, but to compensate innocent sufferers for losses sustained for the common good.

The enforcement of quarantine regulations is further aided by the intelligent co-operation of all officers of the law and of the citizens in general. It may not be necessary to add that the officials in charge of such work must be competent and comport themselves in such a manner as to gain the confidence of the people.

Live stock sanitary work in Ohio is of recent introduction and no complete or perfect system applicable to all diseases has as yet been developed. As a matter of fact, our present state of knowledge of disease would preclude the existence of such a state of affairs under any conditions.

This year marks the end of the first decade of the State Board of

Agriculture acting as the Board of Live Stock Commissioners, and from its modest beginning in May, 1902, it has always been its accepted policy to do its best with whatever so little it might attempt. At the present time strict quarantine is enforced only for the following common diseases: Tuberculosis in cattle where the disease is known to exist in herds from evidence furnished by the tuberculin test; glanders in horses when animals show clinical evidence of disease or where they give typical reactions to a mallein test; rabies in any animals known to have been exposed to infection by means of bites from other animals; scabies in sheep showing evidence of infection or known to have been exposed to infected animals; mange in horses when animals show evidence of infection; other dangerous diseases, such as foot and mouth disease, pleura-pneumonia of cattle, etc., when they are known to have made their appearance in any part of the State.

b. The Establishment and Supervision of Unloading Stations for Southern Cattle Intended for Immediate Slaughter.

The regulations of the Board require that all persons or firms desiring to unload cattle from the quarantine area of the United States must provide special unloading pens into which Northern or susceptible cattle must not be allowed access. These pens must be constructed according to plans and specifications furnished by the State Veterinarian. Unless permits are held, showing that the regulations of this Board have been complied with, railroads will not deliver shipments of Southern or quarantine cattle.

With the co-operation of the United States Bureau of Animal Industry at all important shipping points, these regulations have been successfully enforced during the past ten years.

The following persons and firms have received permits during the last biennial period to unload quarantine cattle:

1910-1911.

Name of Person or Firm.	Address.	Date of Issue of Permit.
Zehner Bros.	Toledo, Ohio	Sept. 7, 1911
N. Rassel Sons & Co.	Toledo, Ohio	March 16, 1909
Ezra Relyea.	Toledo, Ohio	March 16, 1909
C. H. Atkinson.	Zanesville, Ohio	March 16, 1909
The Rehfuess Co.	Lorain, Ohio	March 21, 1909
C. E. Whiting.	Austinburg, Ohio	April 12, 1910
The Columbus Packing Co.	Columbus, Ohio	April 12, 1910
Theurer-Norton Provision Co.	Cleveland, Ohio	Jan. 19, 1911
Henry Walcher.	Cleveland, Ohio	Jan. 19, 1911
Teufel Bros.	Cleveland, Ohio	Jan. 19, 1911
Ohio Provision Co.	Cleveland, Ohio	Feb. 1, 1911
Cleveland Provision Co.	Cleveland, Ohio	Feb. 1, 1911
Lake Erie Provision Co.	Cleveland, Ohio	Feb. 1, 1911
Peoples Packing Co.	Cleveland, Ohio	March 3, 1911
D. S. Sparks.	Cleveland, Ohio	March 3, 1911
F. E. Pressley.	W. Mentor, Ohio	March 28, 1911

Jacob Folger.....	Toledo,	Ohio	May	4, 1911
G. E. Howell Provision Co.....	Newark,	Ohio	June	5, 1911
Canton Provision Co.....	Canton,	Ohio	June	4, 1911
Forest City Provision Co.....	Cleveland,	Ohio	June	19, 1911
F. C. Gerald.....	Slaybrook,	Ohio	June	20, 1911
Long Dressed Beef Co.....	Cleveland,	Ohio	June	20, 1911
Retail Butchers' Pro. Assn. Co.....	Cleveland,	Ohio	June	22, 1911
Hughes Provision Co.....	Cleveland,	Ohio	June	22, 1911
Wm. Webb.....	Cleveland,	Ohio	June	22, 1911
Wm. Bennett & Sons.....	Cleveland,	Ohio	July	31, 1911

In force at beginning of biennial period:

1911-1912.

Name of Person or Firm.	Address.	Date of Issue of Permit.
Retail Butchers' Pro. Assn. Co.....	Cleveland, Ohio	Jan. 9, 1912
Peoples Packing Co.....	Cleveland, Ohio	Jan. 9, 1912
Ohio Provision Co.....	Cleveland, Ohio	Jan. 9, 1912
Theurer-Norton Provision Co.....	Cleveland, Ohio	Jan. 9, 1912
J. H. & R. Hartman.....	Cleveland, Ohio	Jan. 9, 1912
Teufel Bros.....	Cleveland, Ohio	Jan. 9, 1912
Cleveland Provision Co.....	Cleveland, Ohio	Jan. 9, 1912
Blumenstock & Reid Co.....	Cleveland, Ohio	Jan. 9, 1912
Forest City Provision Co.....	Cleveland, Ohio	Jan. 9, 1912
Long Dressed Beef Co.....	Cleveland, Ohio	Jan. 9, 1912
Wm. Bennett & Sons.....	Cleveland, Ohio	Jan. 9, 1912
Lake Erie Provision Co.....	Cleveland, Ohio	Jan. 9, 1912
N. Rassel Sons Co.....	Toledo, Ohio	March 12, 1912
N. Rassel Sons Co.....	Toledo, Ohio	March 26, 1912
Zerner Bros.....	Toledo, Ohio	March 27, 1912
Canton Provision Co.....	Canton, Ohio	April 9, 1912
F. C. Gerald.....	Ashtabula, Ohio	April 9, 1912
F. E. Pressley.....	W. Mentor, Ohio	May 9, 1912
Columbus Packing Co.....	Columbus, Ohio	May 17, 1912
Koblentz Bros.....	Cleveland, Ohio	June 3, 1912
Simon Packing Co.....	Youngstown, Ohio	Sept. 12, 1912

*Unloading Stations for Scab Infected or Exposed Sheep and Cholera
Infected or Exposed Swine for Immediate Slaughter.*

All of our public stock yards are considered as permanent centers of infection for sheep scab and hog cholera. Regulations governing the movement of sheep have been successfully enforced for years. This was made possible by the active co-operation of the National Bureau of Animal Industry and its official inspectors stationed at all important shipping points. As a result, sheep scab, formerly the scourge of the sheep industry of Ohio, now causes the almost insignificant annual loss of a sum less than \$2,500. However, it is possible to absolutely eradicate parasitic diseases of this nature and we should not rest until this has been accomplished.

The movement of sheep, after once reaching any of our large stock yards, is prohibited except for purposes of immediate slaughter.

The following firms and persons have received permits to remove sheep from the Cleveland Yards. These parties must vouch for the disposition, by slaughter, of every animal removed from the Cleveland Yards:

Name of Person or Firm.	Address.	Date of Issue of Permit.
Retail Butchers' Pro. Assn. Co.....	Cleveland, Ohio	May 9, 1910
The Cleveland Provision Co.....	Cleveland, Ohio	May 12, 1910
Ohio Provision Co.....	Cleveland, Ohio	May 12, 1910
Phil Null & Co.....	Cleveland, Ohio	May 12, 1910
G. Koch.....	Cleveland, Ohio	May 12, 1910
Henry G. Flick.....	Brooklyn Sta., Ohio	May 12, 1910
Swift & Co.....	Cleveland, Ohio	May 12, 1910
J. J. Flick Dressed Beef Co.....	Cleveland, Ohio	May 12, 1910
Blumenstock & Reid Co.....	Cleveland, Ohio	May 12, 1910
Koblenzer Bros.....	Cleveland, Ohio	May 12, 1910
Lake Erie Provision Co.....	Cleveland, Ohio	May 12, 1910
Peoples Packing Co.....	Cleveland, Ohio	May 12, 1910
J. H. & E. Hartman.....	Cleveland, Ohio	May 12, 1910
Teufel Bros.....	Cleveland, Ohio	May 12, 1910
Theurer-Norton Provision Co.....	Cleveland, Ohio	May 12, 1910
Henry Walcher, Jr.....	Cleveland, Ohio	May 12, 1910
Armour & Co.....	Cleveland, Ohio	May 12, 1910
Wm. Bennett & Sons.....	Cleveland, Ohio	May 12, 1910
Ed. P. Kittleberger.....	Cleveland, Ohio	May 12, 1910
F. Ullmer & Co.....	Cleveland, Ohio	May 14, 1910
W. J. Webb.....	Cleveland, Ohio	May 14, 1910
John Deobold, Jr.....	Cleveland, Ohio	May 14, 1910
Barney Sweeney.....	West Park, Ohio	May 16, 1910
Hughes Provision Co.....	Cleveland, Ohio	May 16, 1910
W. J. Sweeney.....	West Park, Ohio	May 16, 1910
Long Dressed Beef Co.....	Cleveland, Ohio	May 24, 1910
Robert Webb.....	Cleveland, Ohio	July 20, 1910
Eisermann Bros.....	Cleveland, Ohio	July 20, 1910
F. E. Pressley.....	West Mentor, Ohio	August 26, 1910

Similar regulations affecting the removal of swine should be generally enforced. Until then we cannot hope to cope successfully with the problem of hog cholera eradication, now that an effective immune serum has opened up this possibility.

The removal of swine from the public stock yards of any of our large cities, particularly Cleveland, Cincinnati, Columbus, Toledo and Dayton, is forbidden by the regulations of the Board, but in the past the lack of a sufficient number of competent inspectors has made it impossible to strictly enforce those regulations, except in Cleveland and Cincinnati, where Federal inspectors co-operate, without additional expense to the State.

2.

SHIPPING REGULATIONS.

As already mentioned, shipping regulations, except those controlling the movement of cattle from the quarantine area of the Southern States to prevent the introduction of Southern cattle fever among the susceptible Northern cattle, and Federal and State regulations providing

for the dipping of all sheep entering the State for grazing or feeding purposes, have not been seriously attempted. Our present laws make it impossible to successfully enforce them.

The live stock on Ohio farms is valued at \$180,677,293. The losses from the more common preventable infectious diseases are conservatively estimated as follows:

Glanders in horses.....	\$5,790 00
Sarcoptic mange in horses.....	25,000 00
Rabies in horses.....	7,500 00
Tuberculosis in cattle.....	1,208,515 00
Scabies in sheep.....	2,248 50
Rabies in sheep.....	2,500 00
Parasitic worm diseases of sheep.....	239,622 00
Hog cholera in swine.....	1,711,555 50
Contagious abortion in cattle.....	525,000 00
Total	\$3,727,731 00

This loss has been a regular item in our State economy for years in the past and will, unless checked by the efforts of man, continue indefinitely into the future. Attention is directed to the fact that these losses represent over two per cent. of the entire live stock valuation of the State. This means a tax of two per cent. that yields no returns except in the form of an assurance that it will continue in the future. The meaning of this loss, since it is a regular annual occurrence, can perhaps best be brought home to us by expressing it as a capitalized unnecessary expense, thus, to yield an annual income sufficient to cover this loss would require the investment at four per cent. of \$94,443,275.

The losses from preventable diseases of live stock in Ohio, consequently, represent the interest on a permanent investment of practically \$100,000,000 or fifty per cent. of the value of the industry which they affect.

3.

FIELD INVESTIGATIONS OF OUTBREAKS OF INFECTIOUS DISEASES.

During the biennial period two thousand five hundred and thirty-one field investigations of reported outbreaks of infectious diseases were conducted by the office of the State Veterinarian. These were distributed over the two years as follows: 1910 to 1911, 864; 1911 to 1912, 1,667. Besides our regular force of field veterinarians a few veterinarians of acknowledged ability who are engaged in active practice in various parts of the State, have been called upon to co-operate or assist in this work.

Following is a brief summary of the work accomplished:

a. Glanders in Horses.

In 1910-1911, 82 suspected horses were tested with mallein; 57 were found free from this disease; 21 were found diseased, appraised and killed; 4 gave uncertain diagnoses and were held in quarantine for re-examination at a favorable future opportunity.

In 1911-1912, 148 suspected horses were tested as above. 57 were found free from symptoms of glanders; 16 were found diseased, appraised and killed; 73 gave doubtful reactions to the mallein test and were held in temporary quarantine for re-tests. At the present date, November 4, all but 22 of these have been released. In the past year, the results of practically all mallein tests have been confirmed by the laboratory complement fixation test, which has been found a valuable aid in glanders diagnosis.

The 21 horses killed in 1910-1911 were appraised at \$2,420; the 16 horses killed in 1911-1912 were appraised at \$1,960; total amount of the appraisal of 37 horses killed in the biennial period, \$4,380, itemized as follows:

1910-1911.

No.	Color and Sex.	Name and Address of Owner.	Appraised Value.
1	Gray gelding----	Samuel Knoop, Casstown, O-----	\$60 00
2	Gray gelding----	H. S. Shook, Tyrell, O-----	85 00
3	Black mare-----	R. E. Merry, Caldwell, O-----	140 00
4	Bay mare-----	R. E. Merry, Caldwell, O-----	160 00
5	Brown mare-----	The Snider Saw Mill Co., Somerset, O-----	50 00
6	Gray gelding----	J. W. Powelson, Sarahsville, O-----	150 00
7	Bay gelding----	Peterson & Wright, Akron, O-----	250 00
8	Bay gelding----	Peterson & Wright, Akron, O-----	250 00
9	Bay gelding----	Wm. Bevelhymmer, Napoleon, O-----	185 00
10	Bay gelding----	A. F. Skinner, Logan, O-----	100 00
11	Bay gelding----	John M. Poulton, Newark, O-----	225 00
12	Bay mare-----	Wm. J. Gearing, Pleasantville, O-----	80 00
13	Brown mare-----	Wm. J. Gearing, Pleasantville, O-----	45 00
14	Gray mare-----	Wm. J. Gearing, Pleasantville, O-----	80 00
15	Brown mare-----	Martin W. Moore, West Liberty, O-----	100 00
16	Sorrel gelding----	Martin W. Moore, West Liberty, O-----	50 00
17	Sorrel gelding----	Martin W. Moore, West Liberty, O-----	70 00
18	Sorrel mare-----	Martin W. Moore, West Liberty, O-----	100 00
19	Bay gelding----	John Itley, Tippecanoe City, O-----	140 00
20	Brown mare-----	John Itley, Tippecanoe City, O-----	-----
21	Sorrel gelding----	E. M. McFerren, West Lebanon, O-----	100 00
Total -----			\$2,420 00
Claims paid-----			1,430 00
Claims unpaid-----			\$990 00
Epizootic Lymphangitis-----			-----

1911-1912.

No.	Color and Sex.	Name and Address of Owner.	Appraised Value.
1	Brown gelding--	Julia & Ella Kenny, Cleveland, O.-----	\$100 00.
2	Sorrel mare-----	Wm. Emmons, Jr., Coalton, O.-----	65 00
3	Bay gelding-----	Dave Kemp, Urbana, O.-----	50 00
4	Black gelding-----	Cuyahoga Coal Co., Cleveland, O.-----	250 00
5	Bay gelding-----	Grant Gilmore, Pennsville, O.-----	100 00
6	Black gelding-----	Harry T. Payne, Zanesville, O.-----	100 00
7	Bay mare-----	E. B. Wadley, Zanesville, O.-----	40 00
8	Gray mare-----	E. B. Wadley, Zanesville, O.-----	125 00
9	Bay gelding-----	John Blind, Gnadenhutten, O.-----	60 00
10	Bay gelding-----	John R. Evans, Rockbridge, O.-----	150 00
11	Bay mare-----	John R. Evans, Rockbridge, O.-----	180 00
12	Bay gelding-----	John R. Evans, Rockbridge, O.-----	200 00
13	Black gelding-----	John R. Evans, Rockbridge, O.-----	170 00
14	Bay gelding-----	John Itley, New Straitsville, O.-----	210 00
15	Bay gelding-----	John Itley, New Straitsville, O.-----	-----
16	Black mare-----	Austin Hedges, Lancaster, O.-----	160 00
Total -----			\$1,960 00
Total for 1910-1911-----			2,420 00
			\$4,380 00

As provided by law it is respectfully recommended that the claims of the owners for compensation for losses sustained by the condemnation and destruction of these horses receive your approval, with the recommendation to the legislature that funds be appropriated to pay such portion of these claims as may seem just.

In addition to the outbreak of glanders which are liable, from time to time, to be reported to the Board from eighty-seven of the eighty-eight counties of the State, and which have thus far been effectively dealt with, rather numerous reports of centers of infection in Montgomery County, and particularly in the city of Dayton, are brought to the attention of the Board. The city of Dayton, with the surrounding territory constituting Montgomery County, is, in fact, the only known permanent center of glanders infection in the State. A large percentage of the outbreaks located in other parts of the State in the course of the last four or five years were traced directly to livery stables in Dayton, in which the disease was known to exist in 1906.

The arbitrary action in that year of the Montgomery County Court in enjoining the State Board of Live Stock Commissioners from exercising the powers granted under the law is responsible for this con-

dition. It is to be hoped that these difficulties, which stand in the way of affording the live stock interests of Montgomery County lawful protection, may soon be removed.

b. *Tuberculosis in Cattle.*

In 1910-1911, 121 herds, comprising 1,545 cattle, mostly of the dairy breeds, were tested with tuberculin; 1,265 of these animals were found to be healthy; 105 were found suspicious and held in quarantine for retests; 175 gave positive reactions to the tuberculin test; 126 were destroyed and found, upon post-mortem examination, to have lesions of tuberculosis; 49 animals, on account of their unusual value, were held by special permission of the Board, for the purpose of saving the offspring. 11.32+ per cent. of the cattle tested in 1910-1911 were found tuberculous; 6.78+ per cent. were doubtful or suspicious; 81.90 per cent. were healthy.

In 1911-1912 150 herds, comprising 2,703 cattle, practically all of the dairy breeds, were tuberculin tested. 2,273 animals were found healthy; 140 doubtful or suspicious, and 290 diseased, of which 183 were killed. The remaining diseased animals were held in quarantine under special permission, to save the offspring of the pregnant cows. 10.72+ per cent. of the cattle tested in 1911-1912 were found tuberculous; 5.10 per cent. were doubtful or suspicious; 84.18 per cent. were healthy. Stating the average for two years: Of 4,248 cattle tested (271 herds), 3,538 were healthy; 245 doubtful or suspicious, and 465 diseased; or, 83.04 per cent. healthy, 5.94 per cent. doubtful, 11.02 per cent. diseased. Thus, without including any of the doubtful animals, we find, for Ohio, over 11 per cent. of our dairy cattle tuberculous.

It should be remembered that many of the 271 herds used as a basis for these figures were "retests," that is, they had previously had most of their tuberculous members removed and were thus either counted twice, once as a diseased herd and once as a healthy herd, or as a healthy herd only. These "retested" herds have purposely been included in order to get a more natural "general average" for the whole State.

The average percentage of tuberculous animals, as estimated, 11 per cent. is probably very nearly correct, the average for previous years being about 12 per cent.

The losses from tuberculosis to the dairy industry of Ohio, conservatively stated, exceeds \$1,208,515, or a capitalized loss, at four per cent., of over \$30,000,000.

Following is an itemized list of owners of tuberculous dairy herds, showing the number of diseased cattle destroyed for each and the appraised value of the same:

Tuberculous Cattle Destroyed.

1910-1911.

No. of Herd.	Name and Address of Owner.	No. of Cattle Appraised.	Value.
1	J. A. Beidler, Willoughby, O.....	2	\$150 00
2	J. B. Ortman, Huntsville, O.....	4	137 00
3	J. R. Smith, Canal Winchester, O.....	4	190 00
4	Wm. Thomas, Newton Falls, O.....	8	443 00
5	Elwood Smith, Canal Winchester, O.....	7	320 00
6	H. S. Stauffer, Continental, O.....	1	75 00
7	Lake Breeze Dairy Co., Lorain, O.....	16	720 00
8	National Fire Proofing Co., Haydenville, O.....	10	382 50
9	H. S. Kelly, Mt. Gilead, O.....	2	63 00
10	Herman Schubert, Continental, O.....	5	320 00
11	L. S. Condit, Sunbury, O.....	42	1,990 00
12	John Diemer, Ottawa, O.....	3	105 00
13	C. M. Schooley, Belmont, O.....	1	35 00
14	R. J. Evans, Hudson, O.....	1	50 00
15	Harvey Rantz, North Baltimore, O.....	1	50 00
16	Mrs. Eliza Speicher, Haetville, O.....	2	100 00
17	Sears & Nichols, Chillicothe, O.....	2	100 00
18	P. Hyland, Milo, O.....	2	100 00
19	Paul Wagner, Rockport, O.....	1	47 50
20	S. A. Dunlap, Williamsport, O.....	4	265 00
21	L. S. Condit, Sunbury, O.....	5	220 00
22	E. E. Wilcox, Columbus, O.....	3	142 00
Total		126	\$6,005 00
Claims paid			3,962 00
Claims unpaid			\$2,043 00
Claim of 1908 unpaid.....			

1911-1912.

No. of Herd.	Name and Address of Owner.	No. of Cattle Appraised.	Value.
1	Lake Breeze Dairy Co., Lorain, O.....	5	\$295 00
2	Lake Breeze Dairy Co., Lorain, O.....	8	600 00
3	David L. Schneider, Chillicothe, O.....	1	46 50
4	O. S. Townsend, N. Lewisburg, O.....	1	35 00
5	C. R. Morley, Mentor, O.....	15	1,065 00
6	J. Haag, Columbus, O.....	1	50 00
7	B. B. Gantz, Grove City, O.....	6	285 00
8	B. B. Gantz, Grove City, O.....	8	310 00
9	Geo. & Wm. Reinken, Columbus, O.....	14	605 00
10	W. G. Mullet, Ottawa, O.....	8	510 00
11	G. W. Snyder, Ft. Jennings, O.....	1	40 00
12	W. H. Forbes, Yellow Springs, O.....	15	1,125 00
13	A. C. Lew, Bristolville, O.....	1	75 00
14	J. E. Johnson, Yellow Springs, O.....	1	75 00
15	Beach & Marsh, Plain City, O.....	1	75 00
16	Chas. S. Hatfield, Springfield, O.....	2	135 00
17	John Keller, Arabia, O.....	1	40 00
18	Lyman Riegle, Valley Crossing, O.....	4	137 00
19	A. B. Montgomery, Grove City, O.....	2	100 00
20	A. B. Montgomery, Grove City, O.....	2	100 00
21	B. C. Schubert, Continental, O.....	1	60 00
22	H. J. Carstens, Port Clinton, O.....	1	50 00
23	John Laudy, Port Clinton, O.....	1	50 00
24	A. C. Pendleton, Warren, O.....	1	50 00
25	W. G. Farnsworth, Waterville, O.....	1	50 00
26	J. H. Martin, Springfield, O.....	10	523 31
27	P. T. Spinning, Springfield, O.....	3	200 00
28	C. O. Brumbaugh, New Berlin, O.....	4	153 75
29	W. G. Mullet, Ottawa, O.....	2	95 00
30	W. S. Allen, Lowellville, O.....	9	450 00
31	Fred Feucht, Bexley, O.....	15	689 00
32	Wm. T. Smith, Springfield, O.....	6	315 00
33	W. M. Black, Granville, O.....	1	30 00
34	Frank Roloson, Westerville, O.....	1	50 00
35	W. A. Berry, Marion, O.....	1	30 00
36	Morrow County Infirmary, Mt. Gilead, O.....	2	100 00
37	C. A. Cassell, Mt. Vernon, O.....	1	50 00
38	T. L. Roberts, Columbus, O.....	21	1,017 00
39	F. X. Doubler, Brecksville, O.....	3	150 00
40	M. Schmidtheimer, Bexley, O.....	2	100 00
Total		183	\$9,916 56
Not approved			100 00
			\$9,816 56

As provided by law, it is respectfully recommended that the owners of the cattle destroyed receive one-half of the appraised value of said cattle as compensation for their losses and in recognition of their efforts to build up healthy dairy herds in Ohio.

c. Hog Cholera.

During the years 1910 to 1911 702 herds of swine, comprising 48,873 animals, consisting of healthy and diseased animals and of animals exposed to infection with disease, were treated with immune serum by field veterinarians in the employ of the Board. During the year 1911 to 1912 1,525 herds of swine comprising 88,996 animals, healthy, sick and exposed, as above, were treated.

During the biennial period a total of 2,227 herds, comprising 137,869 animals, were treated. The number of swine treated with immune serum in previous years is as follows: 1908, 400; 1908 to 1909, 5,428; 1909 to 1910, 25,780; making a grand total of 169,477 head of swine treated with immune serum since 1908, when the Board, in a modest way, began the production of hog cholera immune serum with a view to demonstrating its value to the farmers of the State and developing methods for its economic production and a system for its effective application that was hoped would make possible the control, and ultimately lead to the complete eradication of the disease.

In the course of this work many and varied problems presented themselves and had to be met. Space and time forbid to discuss these now. It is hoped that a special report on this subject may soon be written and presented for approval and publication.

As to the immediate practical value of the work, while complete reports on the results of the treatment of all herds to date have not yet been tabulated, information thus far received show that practically 100 per cent. of the healthy animals treated successfully resisted infection for a prolonged period after treatment, and a surprisingly large percentage of evidently infected animals recovered as a result of the injection of serum.

A practical plan for the control and eradication of hog cholera in Ohio will be presented in a special report in the near future and is intended to serve as a guide to the General Assembly in determining its policy toward the future of State aid in the eradication of hog cholera. An itemized report on all herds treated in Ohio with serum prepared in the laboratories of the State Veterinarian is in the course of preparation and when completed will be presented for approval.

d. Mange in Horses.

During the biennial period 96 horses affected with sarcoptic mange, the most contagious skin disease of horses, were quarantined and ordered treated according to methods prescribed by the Board for the cure of this disease. At this time 72 of these animals are still in quarantine.

Owners of horses, especially keepers of livery stables or proprietors of large transportation companies that employ horses, frequently object to the enforcement of the measures prescribed by the Board on account of the unavoidable interference with the regular routine of their busi-

ness. The safety of valuable horses owned by other persons in the community, however, fully justifies the position that the Board takes in these matters.

All infected horses are quarantined. Unless extensively affected, however, owners are permitted to use their horses on the public highways so long as they give promise, in good faith, to assume the responsibility of preventing the affected horses from coming in contact with healthy animals and avoiding hitching in public places without supervision, or putting up in public or private stables except in such part of a stable or barn designated by the State Inspector at the time of issuing the "provisional" quarantine order.

On account of the great infectiousness of this disease and its consequent importance from a sanitary point of view, the location of the infected premises, name of owner or proprietor, and the number of infected or exposed horses still under quarantine are given below in tabulated form.

Curtice Transfer Co., Lima, O.....	37 horses in quarantine
Auburn Marsh, Sumerford, O.....	10 " " "
F. & C. Leerone, Columbus, O.....	5 " " "
John T. Harbiné, Xenia, O.....	1 " " "
F. M. Ashton, Lima, O.....	2 " " "
F. M. Lutts, Norwalk, O.....	2 " " "
Ott Combs, Rushville, O.....	7 " " "
Davis Milligan, Rushville, O.....	3 " " "
Chas. Turner, Rushville, O.....	1 " " "
Ollie Grubb, Chillicothe, O.....	1 " " "
George Oyer, Chillicothe, O.....	1 " " "
Will Michaels, Chillicothe, O.....	1 " " "
Stanley Peters, Middletown, O.....	1 " " "
Total	72

e. Rabies.

During the year 1910 to 1911, 33 reports of outbreaks of rabies among domestic animals were received with requests for field investigation and assistance. Owing to the limited field force at the command of the Board, investigations were confined to making laboratory diagnoses from material sent from the outbreak. As a rule, the material consisted of the head of the suspected animal, usually a dog. The laboratory investigation consisted of a microscopic examination for the determination of Negri bodies, now definitely looked upon as intimately concerned in the production of the disease. Of the 33 outbreaks reported, 15 were investigated as far as laboratory examination of suspected material was concerned. Of these fifteen examinations twelve resulted in a positive diagnosis of the disease, and three in a negative diagnosis. In all cases the persons making the inquiries, or requests, for examination (usually local health officers) were given instructions as to how best to handle

such situations in the absence of effective State laws. Bulletin No. 3, issued by the State Veterinarian some years ago, deals somewhat at length with this subject.

During the year 1911 to 1912, 26 reported outbreaks of rabies were dealt with. In 16 of these outbreaks material was furnished for laboratory examination, and in every instance a positive diagnosis was reported by the pathologist.

For the biennial period, therefore, 59 outbreaks of rabies were officially reported. In 31 instances material was furnished for laboratory diagnosis, and in 28 instances a positive diagnosis of the existence of rabies was made.

The animals affected included horses, cattle, sheep, swine and dogs, although material from dogs was most frequently received.

f. Scabies in Sheep.

In 1910 to 1911, 12 flocks of sheep, comprising 1,626 animals, were reported by federal inspectors as having been shipped out of the state to points where federal inspection is maintained. Investigation of these reports by the office of the State Veterinarian resulted in the location of 24 additional flocks, comprising 1,319 animals, infected with or exposed to scabies.

In 1911 to 1912, 10 flocks of sheep, comprising 1,036 animals, were reported as above, and investigation led to the discovery of six additional infected or exposed flocks, comprising 516 animals.

During the biennial period, 52 flocks of sheep affected with or exposed to scabies were recorded for the state, these comprising a total of 4,497 sheep. Of these, 1,835 were not discovered until they had been shipped out of the state, and were then reported to the Board by Federal Inspectors. These reports led to the discovery of 2,662 infected or exposed sheep still within the state. All of the latter were placed under quarantine and ordered dipped as required by the rules of the board.

At this time 7 flocks, comprising 518 animals are in quarantine.

g. Lip and Leg Ulceration and Foot Rot in Sheep.

These are very prevalent diseases in Ohio, and cause serious losses to the sheep industry. In the biennial period, 248 shipments of sheep affected with one or the other of these diseases were reported to the board by federal inspectors as having been shipped from Ohio to other states. These comprised a total of 27,830 sheep. Investigation from this office led to the discovery and quarantine of 7,605 additional infected sheep, making a total of 35,435 sheep affected with foot rot or lip and leg ulceration, in two years. Owing to the insufficient force of field veterinarians

in the employ of the board, it was not possible to investigate all reports received from federal inspectors stationed in other states, and it is therefore certain that the actual number of affected sheep in Ohio is much in excess of the figures given. It is probably safe to estimate that Ohio contains 100,000 sheep affected with one or the other of these diseases. While these diseases do not, as a rule, cause the death of the affected animal, they affect seriously the general state of nutrition of infected flocks. A resulting loss of only 50 cents per head for infected animals, by no means an exaggerated amount, would indicate that the losses from these affections are at least \$50,000 annually.

The State could well afford to recognize this situation and take steps for affording relief.

4.

PATHOLOGICAL DIAGNOSIS.

Pathological diagnosis or laboratory examination of specimens or organs from diseased animals collected by our field veterinarians or sent in by the general practitioner from all parts of the state, constitute an important and ever growing branch of the work of the office of the State Veterinarian.

It is impossible to carry on, intelligently, any live stock sanitary work according to modern accepted principles without facilities for laboratory diagnosis. The field veterinarians in our employ are constantly meeting with situations and conditions that require the confirmation of a field diagnosis, and this is possible only in a well equipped laboratory.

The practicing veterinarian, also, while he is expected to co-operate with the live stock sanitary authorities in locating and reporting outbreaks of infectious diseases, disseminating useful information relating to preventable diseases of animals and otherwise lending his assistance in a professional way, can serve the public and himself best by being properly assisted by institutions which alone can afford the equipment necessary for the special kinds of work referred to.

While our pathologist, Dr. Fitzgerald, is excellently equipped to handle the kind of work which should properly be referred to him, the scope, quality, value and possibilities of our pathological laboratory would be materially enhanced by the addition to our force of a thorough bacteriologist. The services of a well equipped man for this work could be secured for a salary of \$1,600 or \$1,800 per year, providing that an advancement could be looked forward to for the future.

During the biennial period 96 pathological laboratory examinations were conducted, 53 in the first and 43 in the second year. Besides these, a number of important bacteriological studies concerning the nature of the influence of bacterial infections in hog cholera and their relation to

successful serum immune treatment have been undertaken. Owing to the great demand for serum, however, we have been unable to give these studies the attention that they must be given in the future.

5.

HOG CHOLERA IMMUNE SERUM PRODUCTION.

An appropriation by the General Assembly of 1909 of \$25,000 for the purchase and equipment of a farm, and an additional appropriation of \$60,000 in 1910, for the erection of laboratory buildings, stables, pens and cottages for employes has been expended for the purposes indicated.

The Ohio State Serum Institute and Laboratory for the Study and Investigation of Animal Diseases is located on a 99-acre farm, two miles east of the village of Reynoldsburg, and twelve miles east of the city of Columbus, on the Ohio Electric Railway. This farm consists of nearly level clay land with just sufficient dip to produce perfect working conditions for the complete system of drain tiles, which have been laid through the entire farm paralleling each other at a uniform distance of fifty feet.

There are in all 16 structures, including a sanitary sewage disposal plant, unique in that it was especially designed to meet not only the needs of the institution for insuring safe disposition of farm, laboratory and domestic sewage, but to serve as an experimental plant for the study and investigation of sewage problems in general.

The main laboratory building is constructed of brick, and is fire-proof throughout. This building was designed by the architects, Messrs. Dawson and Holbrook, under direction of the Board. A special effort was made at all times to keep uppermost in mind the importance of simplicity, economy, durability, and above all, adaptability to the ultimate purpose in view. There are seven other brick structures, a hyper-immune pen, a pen or building for experimental animals, an infection pen or yard with virus room, mortuary and crematory attached, a pumping station which houses also the electric transformer applying current from the high tension wires of the Ohio Electric Railway, a storage barn, a general farm barn and a piggery. There are, besides, four sanitary manure pits constructed of concrete, and provided with covers, to receive the litter and manure from the infected animals. There are also three frame dwellings to be occupied by the assistant pathologist, the farm foreman and a laborer's family.

The whole plant has been planned and constructed with a view, not only to use the same as a laboratory for the preparation of hog cholera immune serum, but for the preparation of other serodiagnostics agents and disease preventives as well, and for the study and investigation of infectious diseases of animals in general. The institution, as far as

buildings are concerned, is now practically ready for occupancy. It still remains to purchase and install the necessary furniture and laboratory equipment.

During the past biennial period the old serum plant which was the outgrowth of an original appropriation of \$1,000 in 1908, and \$3,000 in 1909, or a total of \$4,000, has been used for all pathological work and investigations, and in the production of all serum used in the treatment of 2,227 herds of cholera infected and cholera exposed swine, comprising a total of 137,869 animals.

Following is a summary of the hog cholera work conducted in this laboratory for the biennial period:

NOVEMBER 7, 1910, TO NOVEMBER 6, 1911.

Total number of immune hogs hyperimmunized.....	523
Total number of hyperimmune hogs dying following injection.....	28
Percentage of loss from hyperimmunization.....	5%
Number of virus pigs killed in field to furnish virus.....	693
Number of virus pigs killed at laboratory to furnish virus.....	6
Total number of pigs killed to furnish virus for above hyperimmunizations.....	699
Number of bleeding from hyperimmunes.....	1,692
Total amount of blood drawn.....	2,197,794 grams
Total amount of serum prepared.....	2,202,250 cc.
Number of mixtures prepared.....	56
Number of tests of serum made.....	63
Number of pigs used for these tests.....	299
Number of virus pigs killed to furnish virus for immunization....	93
Number of test pigs that died.....	48
Number of strains of field virus used in the work this year.....	73

NOVEMBER 6, 1911 TO NOVEMBER 4, 1912.

Total number of immune hogs hyperimmunized.....	649
Total number of hyperimmune hogs dying following injection.....	20
Percentage of loss from hyperimmunization.....	3%
Number of virus pigs killed in field to furnish virus.....	680
Number of virus pigs killed at laboratory to furnish virus.....	123
Number of pigs hyperimmunized with field virus.....	526
Number of pigs hyperimmunized with laboratory virus.....	123
Total number of pigs used to furnish virus for hyperimmunization	803
Number of bleedings from hyperimmunes.....	2,587
Total amount of blood drawn.....	3,679,380 grams
Total amount of serum prepared.....	3,770,134 cc.
Number of mixtures prepared.....	40
Number of tests of serum made.....	46
Number of pigs used in tests.....	378
Number of test pigs killed to furnish virus for immunization....	114
Number of test pigs that died.....	151
Number of strains of field virus used in the work this year.....	64

6.

THE FIELD APPLICATION OF HOG CHOLERA IMMUNE SERUM.

During the biennial period 2,227 herds of swine, comprising 137,869 animals were given serum immune treatment by the force of field vet-

crinarians in the employ of the Board. As a general policy the serum simultaneous, or so-called double treatment was exclusively used, as opposed to the so-called single or serum alone method. The latter consists of the application of a graduated dose of immune serum injected into the muscular tissue on the inside of the pig's thigh. The immunity following this form of treatment usually lasts from four to six weeks, depending upon the amount of serum administered, the quality of the serum, the age and individual characteristics of the pig treated. If the serum is prepared with the ordinary precautions supposed to be observed in all laboratories, this method is perfectly safe regardless of the potency of the serum. It cannot be said, however, that the results, in the form of a lasting immunity, are what is most desired in this respect.

The serum simultaneous method consists of the simultaneous administration of a graduated dose of potent serum and a certain quantity of disease producing virus in the form of defibrinated blood from a cholera infected pig. This method, while perfectly safe when serum of a certain standard degree of potency is used with properly graduated doses of tested virus, is extremely dangerous in the hands of the uninformed. The advantages of this method consist in the fact that immunity conferred therewith is much more lasting than that following the single treatment. The average duration of immunity in pigs treated after the suckling age, or at about ten weeks, ranges from six to eight months or longer, depending much upon the individual pig. Suckling pigs treated when a few days old, or immediately after birth, retain their immunity for eight or ten weeks when they may be again treated, and then remain protected until they are ready for market. Brood sows and males may be kept immune by repeated yearly application of the double treatment. The expense of this method is not excessive, average, when carried out systematically, about 50 cents for a marketable hog. The use of the serum alone method on the other hand, is expensive, since it must be repeated at frequent intervals, and never gives lasting immunity.

While the mere application of the serum, the technic, is a comparatively simple procedure, as far as either of the methods are concerned, there is room for the exercise of a good deal of judgment, skill and knowledge in the practical administration of the serum to healthy, diseased or exposed herds. We have become thoroughly convinced of this in the course of our experience during the past four years.

From 1908 to 1910 all serum prepared in the laboratories of the Board was applied directly by veterinarians in its employ. At the end of that time, being short of funds, some of the serum was turned over to practicing veterinarians in different parts of the state. These men, while generally regarded as efficient and successful practitioners, did not meet with the successful results that were uniformly characteristic of the work of our own trained men. This was but natural. The efficiency of men

who devote their entire time in fitting themselves for a certain line of work cannot be expected from a general practitioner who has varied interests to look after and to whom the diseases of swine are, and have ever been, of secondary importance.

The Board thereupon resumed its original policy of applying all serum produced in its laboratories by its own field veterinarians. It seems that this is the only rational policy with regard to this disease, if as is proposed, any successful effort is ever to be made for the control and final complete eradication of hog cholera in Ohio. The interests at stake are so great that, for the present, at least, no better method of handling the situation has been suggested.

Just before the end of the biennial period covered by this report, printed form for reports on the result of serum treatment of herds of swine had been sent to the owners of all herds treated. Many replies have already been received, and the labor of compiling and tabulating the results has begun. The knowledge gained from these reports promises to be so valuable and interesting that it is proposed to write a special report on this work. The reports show, almost uniformly, that the work was satisfactory, and that the owners are taking it up with enthusiasm.

7.

THE PREPARATION OF TUBERCULIN AND MALLEIN FOR DIAGNOSING TUBERCULOSIS IN CATTLE AND GLANDERS IN HORSES AND THE SERO-DIAGNOSIS OF THESE AND OTHER DISEASES.

Tuberculin and Mallein used in the official diagnosis of tuberculosis of cattle and glanders in horses by the Board, have, in the past, been supplied by the National Bureau of Animal Industry.

Several states are preparing these agents in their own laboratories, and with the completion of the new laboratories of the Board, Ohio will be prepared not only to supply all of these diagnostic agents for its own official use, but to supply its hundred of licensed veterinarians with a reliable product to carry on legitimate private work.

There lies before us, in the immediate future, an immense field of usefulness in similar lines of work. Serum therapy is only in its very infancy and the possibilities of the future are as yet unknown. Already, however, sera for the successful treatment of a large number of the common infectious diseases of animals have been produced. It remains now for the state to encourage the economic production and the legitimate use of such sera as are already known, and to develop new ones for diseases, which, thus far, we have failed to successfully combat by the old-

er methods. The State Serum Institute and Laboratory for the Investigation of Animal Diseases is the logical place in which to develop this work:

8.

EXPERIMENTAL INVESTIGATIONS.

The field for experimental investigation in the realm of animal diseases is a large one. While the possibilities in this direction have long lain dormant in the State of Ohio, the creation of the State Serum Institute marks the beginning of an epoch in which the people as a whole have awakened to the idea that as an economic factor this phase of public duty should no longer be neglected.

The total live stock valuation of the state is given as \$180,677,293. The total losses from infectious, and consequently preventable diseases, has been conservatively estimated to exceed \$3,777,731, or nearly four million dollars. This estimate does not include tuberculosis in swine, rabies in these animals and in cattle, forage poisoning in all animals, but especially in sheep and horses, influenza and strangles in horses and mules, infectious diseases of poultry, foot rot and necrobacillosis of sheep, which alone cause an annual loss of no less than \$50,000 to our flocks, nor a host of other diseases the nature of which is still more or less obscure.

This loss, \$4,000,000, since it constitutes a permanent drain on our state wealth, may be looked upon as a capitalized loss of \$100,000,000 drawing four per cent. interest. This is equal to fifty per cent. of the appraised value of the live stock industry of the entire state.

With the creation of the State Serum Institute the Board feels that the development of this branch of live stock sanitary work has been made a part of its official work.

9.

EDUCATIONAL WORK.

Successful live stock sanitary work cannot be accomplished without the willing and intelligent co-operation of the people with the authorities charged with the control of animal diseases.

The Board has always recognized this fact, and with the furtherance of everything that might aid in increasing the effectiveness and general usefulness of this department in view, the policy of getting in touch with the people through their county fairs, farmers' institutes and the agricultural press, has been adopted.

An extensive exhibit consisting of live animals affected with common infectious diseases (carefully housed and protected with galvanized

iron floors and sides to the cages, and wire screens overhead), specimens of condemned carcasses and cuts of meat from abattoirs where government inspection is maintained, preserved pathological specimens in jars and so-called bullseye anatomical preparations, photographs, lectures illustrated with stereopticon views, books, pamphlets, circulars, maps showing the distribution of prevalent diseases, etc., etc., is held annually at the Ohio State Fair.

The demonstrations are always well attended by an interested and intelligent audience. The exhibits were reproduced on a somewhat smaller scale at county fairs, and supplemented with a practical tuberculin test of two or three known tuberculous cattle, and one or two supposedly healthy one. The demonstrations were followed by the slaughter of all of the cattle in the test, and the exhibition of their diseased, or healthy organs. The instructional value of these exhibits is very great, and they met with general popular approval. Last season fair exhibits were made as follows: Springfield, Clark County; Lucasville, Scioto County; Bellefontaine, Logan County; Napoleon, Henry County; Mansfield, Richland County; Barnesville, Belmont County; Wauseon, Fulton County; Powell, Delaware County; Ottawa, Putnam County; Rainsborough, Highland County; Lancaster, Fairfield County, and New Philadelphia, Tuscarawas County, and the Ohio State Fair, Columbus. In the year 1910-1911, fair exhibits were held at Tiffin, Seneca County; Celina, Mercer County; Marysville, Union County; Mt. Gilead, Morrow County, and at the Ohio State Fair, Columbus, Ohio.

Farmers' institutes were attended by representatives of the office of the State Veterinarian in the biennial period whenever time permitted. About twenty-five different institutes were attended in the biennial period. These efforts were well received, and it is hoped that opportunities will be afforded for the further development of this important line of educational work.

10.

EXECUTIVE WORK.

The duties involved include a correspondence totaling 8,000 letters for the biennial period; the reading and writing of all reports concerning the work of the Board; keeping of accounts covering the receipt of \$106,199.14 from the sale of hog cholera serum, and a general appropriation of \$44,950 for the biennial period, and fees charged for the tuberculin testing of cattle, and for mallein testing of horses intended for export to other states or countries; attending public meetings of societies and associations organized for the promotion of live stock sanitary problems; the preparation of educational articles on live stock sanitary matters for the agricultural press; the planning and supervision of the

erection of the serum institute, and the general supervision of all field investigations of which 2,531 were conducted in the biennial period, or 864 in the first, and 1,667 in the second year; the supervision of serum preparation, its field application and the investigation of prevalent animal diseases. In short, the general scope of this work has been outlined in the foregoing pages.

PAUL FISCHER,
Secretary.

A. P. SANDLES,
State Veterinarian.

REPORT
OF
Boys' Acre-of-Corn Contest
1912

(843)

OHIO DEPARTMENT OF AGRICULTURE
A. P. SANDLES, *Secretary*

INFORMATION BLANK NO. I
BOYS' ACRE-OF-CORN CONTEST
1912

Fill in this blank and send to A. P. Sandles, Secretary Ohio Department of Agriculture, Columbus, Ohio, by September 1st.

We wish the answers for general information as to how you raised the corn. So please fill in for each question.

The answers will NOT figure in the distribution of the prizes. So you need not have any hesitancy in answering them.

Keep one of these blanks for your record, and send the other to the Department of Agriculture, Columbus, Ohio.

OHIO DEPARTMENT OF AGRICULTURE.

INFORMATION BLANK No. 1, BOYS' ACRE-OF-CORN CONTEST

Name ----- Age -----
Postoffice ----- Township ----- County -----
Kind of soil -----
Is it tile drained or surface drainage only? -----
When was land plowed? ----- How deep? -----
How prepared (disked, harrowed, rolled)? -----
How often? -----
When did you plant the corn? -----
Check, drill or by hand -----
How many kernels in hill? -----
Distance between rows -----
If drilled, distance between kernels -----
Did you harrow or roll after planting? ----- How often? -----
Name of seed corn ----- White or yellow -----
Where did you obtain the seed? -----
How many years has it been grown in your community? -----
Did you test the seed? -----
Was seed selected from field last fall or taken from crib after corn had been gathered? -----
How was seed kept during the winter? -----
Did you manure the ground? ----- How many loads per acre? -----
Was it taken from open or covered barnyard, or fresh from stable? -----
When was manure hauled on field? ----- Was it scattered at once? -----
Did you use commercial fertilizer? ----- How much per acre? -----
What was analysis on bags? -----
How was it applied; drilled in all over acre or check in hills only? -----

Was any of corn soft, immature or unsalable?-----
 Was there any corn other than that grown upon said acre, counted in or added
 to the weights?-----
 Was there any chance for a mistake whereby any part of this corn might have
 been weighed twice?-----
 Do you say that the intent of the rules governing this contest have been honestly
 complied with?-----
 Did you witness the work?-----
 What was average yield of corn per acre in immediate vicinity this year?-----
 Signed

-----Grower
 -----Postoffice

 -----Judges.

AFFIDAVIT

This affidavit must be sworn to and sent in sealed envelope with other papers
 to the Secretary of Agriculture, Columbus, Ohio, and duplicate mailed to the per-
 son, firm or company offering free trip to Washington.

State of Ohio,

-----County, ss.

We -----
 of county and state aforesaid, do solemnly swear or affirm, that we are the two
 men, appointed by the county commissioners, to assist in measuring the ground,
 husking and weighing the corn on the acre of corn grown by-----
 And that the ground was measured according to the rules prescribed, and all its
 conditions carried out; and that the corn was husked on the stalk standing in the
 field; and that the total amount raised on said ground of corn in the ear, weighed
 -----pounds; and that one hundred pounds of ears were selected
 from the total said acre's yield, and shelled by us, and that the corn so shelled,
 weighed-----pounds and-----ounces.

And that we are in no way personally interested in the result of this test,
 and are not in any way related to the grower of said corn.

And that we hereby declare that said above results were honestly obtained.

Signed

-----Postoffice
 -----Postoffice

Sworn to before me and subscribed in my presence this ----- day of
 November, A. D. 1912.

 N. P. or J. P.

Both men must sign and acknowledge above.

ON TO WASHINGTON

BUCKEYE BOYS' CORN SPECIAL

THE OHIO
DEPARTMENT OF AGRICULTURE

BOYS' GREAT CORN GROWING CONTEST
1912

SUGGESTIONS

1. Give every farmer boy a chance to see the White House.
2. Every county should offer a free trip to Washington to the farm boy who will grow the most shelled corn on one acre of ground.
3. The boy to be not over twenty years old on January 1, 1912.
4. Entries should be made not latter than June 1, 1912.
5. Boys should actually do the work and select the seed. Drainage may be done by land owner.
6. County Commissioners appoint two reputable citizens, who live in the township where corn is grown, to measure the ground, help to husk and measure corn; and certify the results to the person, firm or company offering the prize.
7. The boy, or his parents, to pay all expense of measuring, husking, weighing and certifying.
8. The County Commissioners may appoint two men for each acre that is competing in a township. The same two men need not judge all the contesting acres in a township.
9. Form of acre to be rectangular, eight rods wide and twenty rods long, or ten wide and sixteen long.
10. Corn husked on stalk, between the morning of the first day of November and the evening of tenth day of November, 1912.
11. Corn from entire acre to be weighed in ear.
12. One hundred pounds of corn in ear shall be selected, shelled and weighed by the judges, and result certified on proper certificate which will be furnished.
13. The shelled corn on whole acre will be estimated from amount of shelled corn on the 100 pounds of ear corn.
14. The boy should select seed that will grow corn as well as cob.
15. Yellow, white, or mixed corn may be grown.
16. Information obtained from Experiment Station, College of Agriculture, farm papers, U. S. Department of Agriculture at Washington, fertilizer companies, or elsewhere, should be asked for by the boy himself writing for it.
17. Information certificates must be filled out by the boy, and mailed to the Ohio Department of Agriculture at Columbus.
18. More than one boy may go from a county if more than one offer is made by persons in that county.
19. If some crop other than corn is desired, the offer may be made for the best yield of potatoes, onions, beets, etc.
20. The persons making the offer may prescribe any rule they want. All or any of these suggestions may be disregarded, except numbers 5 and 17. Failure to observe these two would be cause for refusal to permit boy to join party.
21. The Department of Agriculture will accept no money. The expense

money must be collected or guaranteed and taken care of by some person in each county sending the boy, and the money turned over to him before starting.

22. The State Board of Agriculture will arrange details and complete program of the trip. Rates, sleeping cars, starting points and all will be announced later. The cost will not average \$50 per boy.

23. The entire party to travel on one train to be known as the Buckeye Boys' Corn Special.

24. While the State Board of Agriculture has invited county fair boards, bankers, grain dealers, millers and grangers to join in helping this plan, any citizen may contribute if he so desires.

25. The persons making the offer to send a boy, to give publicity and advertise as they deem best.

26. Parents or friends may go with the party, if they so desire and pay their own expense, if notice is given in time to make proper arrangements.

27. Honesty and square dealing should be observed in this contest, so that no boy will have any cloud cast upon his right and title to go on this trip.

28. The boy growing the corn shall make written request of the County Commissioners to appoint the two judges, who shall not be in any degree related to the boy, or in partnership in any business with the boy or his family.

29. The certificate of the two judges shall not be questioned, but it shall be accepted as truthful and final.

30. The persons offering the prize shall determine which boy has won, but in cases of serious dispute may refer the question to the county commissioners or other disinterested parties.

31. In case two or more offers are made in a county, the boy or boys raising the next best acre may be awarded the trip also.

32. The welfare and safety of the boys will be carefully looked after from the starting point until the return.

For further information address,

A. P. SANDLES, Secretary, Columbus.

ON TO WASHINGTON INVITATION

Everybody invited—mothers, fathers, sisters, brothers, friends—Come. Be one of the boys—years don't count. A liberal education and some life-lasting inspiration are in store for those who go. It will be worth more than five hundred dollars to you—and it costs only fifty for boys and sixty for adults.

ALL ABOARD! THE BUCKEYE BOYS' CORN SPECIAL

Trip to Washington
Monday, December 16, 1912
Via Pennsylvania Lines

CONDUCTED BY THE
OHIO STATE DEPARTMENT OF AGRICULTURE
A. P. SANDLES, *Secretary*

ITINERARY

Half day in Pittsburgh, the great Smoky City, as guests of the National

Stockman and Farmer, and of Henry Heinz, the pickle man, sight-seeing including stock yards, steel plants, Carnegie Technical Institute, Heinz's pickle plant, etc.

Daylight trip across the Allegheny mountains, past Johnstown, the Flood City, and along the beautiful Juniata river, with a ten-minute stop at the famous Horse Shoe Bend for a picture of the Buckeye Corn Special and its party.

Four hours of evening sight-seeing and entertainment in Harrisburg, the capital of the Keystone state.

Three full days' stay in Washington at the Winston Hotel, a new, fireproof, high class hotel, situated four blocks from the Union Station, and within the shadow of the Capitol building; good meals, comfortable rooms, equipped with telephone, shower baths, etc.

Sight-seeing in Washington will include a tour of the city in autos, accompanied by lecturing guides who will explain each point of interest.

Wednesday afternoon, as guests of The Ohio Farmer, our party will take a boat trip down the Potomac river to Mt. Vernon, Washington's home.

Thursday afternoon President Taft will receive us at the White House. A handshake and a word of greeting from the president of the United States is in store for each member of our party. We shall ask President Taft to stand with our party of Ohio boys for a photograph.

Congress will be in session and arrangements have been made for admission to both the Senate and House of Representatives while in session.

Theater parties, lectures, banquets and other delightful and instructive entertainment will fill the hours.

A hundred years ago no prince could enjoy a trip such as this which is afforded the farm boy of Ohio today.

• HOW THE BOYS WILL BE CARED FOR

Each car of boys will be organized into a company, under the care and command of a competent captain.

No boy will be allowed to separate from his company except upon due reason and permission by the captain in charge.

The entire regular trip will be made via Pennsylvania railroad in standard Pullman sleepers. Each car will maintain a porter to care for the boys' comfort and convenience.

Two physicians delegated by Governor Harmon from the Ohio National Guard will accompany the party.

SUGGESTED BOYS' TRAVELING EQUIPMENT

Train smoke and city soot are no respectors of skin or clothes. Be prepared. Don't start out in your best—save them for Washington.

Carry lunch sufficient to do until breakfast Tuesday morning, December 17, when we will begin to dine in style on dining cars and at hotels.

Carry your clothes and toilet articles in a suit case or grip. Here's a suggested list which may help in packing up:

Two or three shirts, collars and cuffs, three to six handkerchiefs, neckties, socks, change of underwear, night gown, etc. Remember a tooth brush, hair brush and comb, umbrella.

If you play, fairly well, a violin, cornet or other portable musical instrument, take it with you.

ANNOUNCEMENT AND INSTRUCTIONS

T. P. Riddle, of Lima, Ohio, is duly appointed treasurer of the Buckeye Boys' Corn Special Trip to Washington. For boys, fifty dollars (cash or check) must be delivered to him, or to his duly authorized representative, in advance of boarding the train. For adults, sixty dollars shall be required.

It is preferred that the remittance be made by mail reaching Mr. Riddle by noon, Saturday, December 14; but it may be handed to him, or to his duly authorized representative, at the time of boarding the train.

A receipt and a party membership ticket will be issued by Mr. Riddle for the amount received from each one and an itemized accounting will be rendered to each one promptly upon the completion of the trip, with a refund of any balance which may be due.

The party membership ticket will admit the bearer to the Buckeye Boys' Corn Special, sleeping car berth reservation, meals on train and at hotels, sight-seeing trips, theaters and to all other regular entertainments of the trip. Don't lose this ticket. Important.

The entire regular traveling expense of the boys, from the start at the home station until the return to the home station, including meals, lodging, entertainment, etc., is included in the "free trips."

Boys are asked to advance their local car fare from their home station to the point where they board the Buckeye Boys' Corn Special and to present to Mr. Riddle a written statement of the amount advanced. (A blank form for use in that connection is enclosed herewith.) This amount, along with an amount sufficient to cover the return, will be refunded by Mr. Riddle during the trip.

Caution: Each winner of this free trip to Washington should immediately get in touch with the party or parties who are to furnish the required fifty dollars, and make sure that it is delivered in time.

SCHEDULE OF BUCKEYE BOYS' CORN SPECIAL

THREE SECTIONS

The main section of the Buckeye Boys' Corn Special will originate on the main line of the Pennsylvania railroad at 5:30 p. m., Monday, December 16, at Van Wert, Ohio. Regular stops will be made as listed below.

The southern section will consist of two Pullman sleepers attached to Pennsylvania railroad train No. 34, leaving Cincinnati at 5 p. m., Monday, December 16, and passing through Columbus at 8:20 p. m. Regular stops will be made as listed below. This section will join the main section in Pittsburgh the following morning.

The Toledo section will consist of a Pullman sleeper attached to Pennsylvania railroad train No. 420, leaving the Union station at Toledo at 4:55 p. m., Monday, December 16. Regular stops will be made as listed below.

So far as practical, it is hoped that boys, and others, may assemble in groups of ten or more. It is suggested that you confer with those around you and that you assemble at some station where there will be ten or more even though it costs you a little more local car fare to reach such a point.

MAIN SECTION	TOLEDO SECTION	SOUTHERN SECTION
Van Wert to Pittsburgh Special Train	Toledo to Mansfield Train No. 420	Cincinnati to Pittsburgh Regular Train No. 34
Van Wert..... 5:30 p. m.	Toledo 4:55 p. m.	Cincinnati ---- 5:00 p. m.
Delphos 5:41 p. m.	Woodville ---- 5:26 p. m.	Columbus ---- 8:20 p. m.
Lima 6:15 p. m.	Tiffin 6:20 p. m.	Newark 9:15 p. m.
Dunkirk 6:40 p. m.	Corrothers ---- 7:00 p. m.	Trinway 9:45 p. m.
Forest 6:50 p. m.	Vernon 7:27 p. m.	Coshocton ---- 10:05 p. m.
Upper Sand'sky 7:10 p. m.	Mansfield ---- 7:45 p. m.	Newcomerst'n 10:28 p. m.
Bucyrus 7:35 p. m.		Dennison ---- 11:00 p. m.
Crestline ---- 7:55 p. m.		Steubenville 12:15 a. m.
Mansfield ---- 8:15 p. m.		Pittsburgh ---- 1:45 a. m.
Wooster 9:00 p. m.		
Orrville 9:10 p. m.		
Massillon ---- 9:25 p. m.		
Canton 9:35 p. m.		
Alliance 9:50 p. m.		
Pittsburgh ---- 11:30 p. m.		

OHIO DEPARTMENT OF AGRICULTURE

A. P. SANDLES, *Secretary*

BOYS' CORN-GROWING CONTEST

ENTRY BLANK

Each boy must fill out two of these blanks on or before June 1, 1912. Mail one to A. P. Sandles, Columbus, Ohio, and one to the persons who offer to pay the expense of a trip to Washington, D. C.

Note—Every boy is asked to answer the following questions if he can. Do not be afraid to say "No" to any of them. The answers will not count anything against you, and your name will not be used.

Gentlemen—I desire to enter and compete for the free trip to Washington, D. C. I desire to grow more corn on one acre of ground than any other boy can grow in my county. I appreciate the generosity and kindness of those persons who will pay the expense of this trip.

Signed.....

Name Postoffice.....

Township..... County.....

Which telephone exchange, if any.....

Age Born on the..... day of the month of..... in the year.....

Prizes offered by whom.....

Have you ever been in Washington?..... Have you ever been outside of Ohio?.....

Have you ever been outside of your county?.....
Do you believe that the average crop yields in Ohio can be increased?.....
Do you believe a farmer can make money in Ohio?.....
Have you ever attended an agricultural college?.....
Have you ever attended an agricultural extension school?.....
Do you attend institutes?.....
Are you a Boxwell graduate?.....Have you attended high school?.....
Can you name the three big state agricultural institutions in Ohio?.....
If so, write them here.....
Who is at the head of each of these institutions?.....
Have you ever attended the State Fair?.....
Did you ever ride on a railroad train?.....
Did you ever go to bed on a sleeping car?.....
Did you ever eat on a dining car?.....Did you ever eat at a hotel?.....
Do you expect to make farming your business?.....
Do you appreciate the generosity of the persons making this splendid offer?.....

THE OHIO FARM BOY IS IN THE KING ROW.

"RAISE THE AVERAGE" IS THE SLOGAN—THE AVERAGE YIELD PER ACRE FOR 510 OHIO BOYS WAS 85 BUSHEL

Average age, 16. State average for men, 35 bushels—Moral: Be a Boy—Public spirited business men guaranteed the expenses of 200 Corn Boy Winners to Washington, D. C., 1912—Nearly 1,200 boys entered the contest. conducted by the State Board of Agriculture.

ROLL OF HONOR.

Ohio Boys Who Raised Over 100 Bushels on One Acre of Ground in the 1912 Acre of Corn Contest.

Name.	Postoffice.	County.	Busbels.
Dewey Hanes.	Arcanum.	Darke.	139.125
Jacob W. Rupp.	Archbold.	Williams.	133.689
George O. Wilson.	Newark, R. D. No. 2.	Licking.	131.724
Fred Jones.	Cardington.	Morrow.	130.65
Lawrence Hussey.	Pt. Jefferson.	Shelby.	130.56
Orville House.	Genoa.	Ottawa.	129.812
Homer Crecelius.	Milan.	Erie.	123.642
Lee Ferry.	Kent.	Portage.	123.243
Arthur Borton.	Payette.	Fulton.	122.295
Forest Parmeter.	McConnelsville.	Morgan.	121.405
Orlo E. Bishop.	Hamler.	Henry.	121.379
Byron Bingham.	Rutland.	Meigs.	119.242
Charles Short.	Elmira.	Fulton.	118.31
James L. Mathias.	Groveport.	Franklin.	116.871
John Van Fossen.	Tacoma.	Belmont.	116.285
Ralph C. Smith.	Bryan, R. D.	Defiance.	115.066
Orville Hoffman.	Miller City.	Putnam.	114.991
Forest W. Eley.	Mt. Vernon, Box 233.	Knox.	114.314
Harry J. Simons.	Warren.	Trumbull.	113.474
James Fitz.	Venice.	Erie.	113.162
John Hefflinger.	Napoleon.	Henry.	113.071
Franklin E. Fantz.	Hume.	Auglaize.	112.75
Frank L. White.	Chandlersville.	Muskingum.	111.9
Arthur Fitz.	Venice.	Erie.	111.871
Louis Verbryke.	Lebanon.	Warren.	111.551
Clarence Smith.	Rockford.	Mercer.	110.978
Hobert Marsh.	Waynesville.	Warren.	110.712
John Tabor.	Delta.	Fulton.	110.466
Stanley Burif.	Eaton.	Preble.	110.453
Albert Opp.	Forest.	Wyandot.	110.157
Dwight Nicholson.	Bysville.	Guernsey.	110.049
Clinton Stevenson.	Canal Winchester.	Franklin.	109.901
Edgar H. Will.	Canal Winchester.	Franklin.	109.717
Fay E. Less.	Edon.	Williams.	109.494
Lawrence Kaufman.	Dayton.	Montgomery.	109.386
Harlan Powell.	Bidwell.	Gallia.	109.33
Fred Iuen.	Madisonville.	Hamilton.	108.936
Merl E. Miller.	Ottawa.	Putnam.	108.693
Bruce Kline.	Hicksville.	Defiance.	108.439
Howard Hoffman.	Miller City.	Putnam.	107.65
H. P. Oberlin.	Bryan.	Williams.	107.633
Alva Hagy.	Defiance.	Defiance.	107.464
M. C. DeMuth.	Whitehouse.	Lucas.	107.288
Clarence G. Hayes.	Bellefontaine.	Logan.	107.155
Alva Ditto.	Blida.	Allen.	107.071
Howard Waugh.	Bowling Green.	Wood.	106.872
Ray H. Staver.	Lima, R. D.	Allen.	106.842
L. Paul Castor.	Bryan.	Williams.	106.666
Roy Huffman.	Grand Rapids.	Wood.	106.63
Jay Lawrence.	Coshocton.	Coshocton.	106.38
Kenneth D. Evers.	Lyons.	Fulton.	105.692
Harvey Douglass.	Camden.	Preble.	105.144

ROLL OF HONOR—Concluded.

Name.	Postoffice.	County.	Busbels.
W. H. Raub	LaRue	Marion	105.282
John Lodge	St. Clairsville	Belmont	105.239
Forest T. Martin	Springfield, R. D. 5	Clark	105.228
Carson F. Metz	Wapakoneta	Auglaize	105.125
Carl E. Miller	Jeffersonville	Payette	104.822
Robert Powell	Bidwell	Gallia	104.514
J. Edgar Williams	Hillsboro	Highland	104.491
Harry Van Wagner	Tontogany	Wood	104.392
George Kappauf	Bellevue	Sandusky	104.241
L. F. Rodeffer	Eaton	Preble	103.965
Forest R. Stahl	Wooster	Wayne	103.62
Geo. C. Rapa	Hamilton, R. D. 1	Butler	103.357
Elvin Mann	West Unity	Williams	103.068
Elmer J. Fitzpatrick	Radcliff	Vinton	103.01
Marion Filley	Delta	Fulton	102.941
Gordon A. Ross	Wauseon	Fulton	102.493
Glen Detwiler	West Unity	Williams	102.371
Foster Cavin	Conover	Shelby	102.078
Lawrence Keisey	Swanton	Lucas	102.065
C. F. Wistinghausen	Napoleon, R. F. D.	Henry	101.931
Lawrence Perry	Wauseon	Fulton	101.852
Chas. Weston	North Dover	Cuyahoga	101.823
Geo. Kleptine	Bradford	Darke (corn cut)	101.767
Thos. Ritchie	Montezuma	Mercer	101.691
Clay Cavin	Conover	Shelby	101.637
Donald Zimmerman	Jeffersonville	Payette	101.583
Perry Levering	Fredericktown	Morrow	101.22
Harvey E. Weber	Pandora	Putnam	101.082
R. Gail Goble	Lima, R. D.	Allen	101.071
Walter Blumenstock	Arcanum	Darke	101.
Pursell Harper	Defiance	Defiance	100.949
Elwood Ward	Urbana, R. D.	Champaign	100.822
Carl B. Frye	Waynesville	Warren	100.787
Trenton O. Price	Payne	Paulding	100.566
Foy Haines	Coshocton, R. D. 1	Coshocton	100.237
Jos. Stockstill	Sidney, R. D. 3	Shelby	100.168
Sam Armstrong	DeGraff	Logan	100.142
Alexander Fortman	Kalida	Putnam	100.83
Munson R. Bize	Pandora	Putnam	100.05
Jesse Harton	Coshocton, R. D. 1	Coshocton	100.02

REPORT OF THE 1912 OHIO BOYS' ACRE OF CORN CONTEST BY COUNTIES.

The Winners to have a Free Trip to Washington, D. C., Money for which was Subscribed by the People who "Push" in the Various Counties.

ADAMS COUNTY.

No free trip offered and no entries.

ALLEN COUNTY.

Seven free trips offered. Thirty-nine boys entered and eighteen boys finished, as below:

Name.	Postoffice.	Township.	Busbels.
Alva Ditto	Elida	Marion	107.071
Ray H. Staver	Lima, R. D.	Bath	106.842
R. Gail Goble	Lima, R. D.	Monroe	101.071
Arthur Tudor	Lima, R. D. 3	Sugar Creek	95.228
Harry Amstutz	Bluffton, R. D. 2	Richland	92.655
Edgar H. Tudor	Lima, R. D. 3	Sugar Creek	91.11
Arnett Ross	Alger	Auglaize	90.568
Fred Hover	Harrod	Auglaize	89.963
Dick Miller	Elida	German	87.543
George Shaffer, Jr.	Spencerville	Spencer	80.462
Alois J. Klausung	Delphos, F. D. 3	Marion	73.919
Leland L. Good	Columbus Grove	Monroe	73.211

ALLEN COUNTY—Concluded.

Name.	Postoffice.	Township.	Bushels.
John Klausing	Delphos	Marion	72.781
Clifford Hall.	Harrod	Auglaize	72.025
Homer Rider	Spencerville	Spencer	70.875
Ira Wilkin.	Harrod	Auglaize	63.817
Stanley Winegardner	Harrod	Auglaize	56.316
Victor Larue.	Lima	Bath	40.885

ASHLAND COUNTY.

No free trip offered in Spring, but money raised December 18th to send one boy to Washington. Two boys entered, one boy finished, as below:

Name.	Postoffice.	Township.	Bushels.
Geo. J. Brubaker.	Ashland	Clear Creek	60.

ASHTABULA COUNTY.

No free trip offered. Four boys entered in contest. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Julius M. Benson.	Jefferson, R. D. 6	Denmark	49.395
Lyle B. Fobes.	East Orwell	Colebrook	47.252
Chester W. Miner.	Williamsfield	Wayne	32.012

ATHENS COUNTY.

No free trips offered. One entry in contest, but he did not finish.

AUGLAIZE COUNTY.

Eleven free trips offered. Thirty-seven boys entered contest. Nineteen boys, as below:

Name.	Postoffice.	Township.	Bushels.
Franklin E. Fantz	Hume	Logan	112.75
Carson F. Metzz	Wapakoneta	Union	105.125
Gustave G. Schroer.	St. Marys	Washington	99.22
Herman Wright	Spencerville	Salem	95.805
Harold L. Fisher	Wapakoneta	Moulton	90.285
Stanley Place	Hume	Logan	89.834
Pred Loomis.	Waynesfield	Wayne	89.098
William L. Frank	Wapakoneta	Duchonquet	88.677
Cecil Thrush.	St. Johns	Clay	87.142
Victor Lusk	Wapakoneta, R. D. 10.	Union	81.64
Harry Romshe	Wapakoneta	Logan	80.106
Dewey Lusk	Wapakoneta	Union	77.972
Estelle Mallroy	St. Marys	Noble	72.067
Chester Cummins	St. Marys	Noble	64.281
John Heap	St. Marys	Noble	64.149
Arley Moeller.	New Bremen	German	60.341
Hugh Fleming	Minster	Jackson	52.2
Joshua Winget.	Wapakoneta	Duchouquet	43.752
Elmer Mohrman	New Bremen	German	39.737

BELMONT COUNTY.

Two trips offered. Several boys entered in the contest. Nine boys finished, as below:

Name	Postoffice	Township	Bushels
John Van Patten	Warren	Warren	114.365
John Van Patten	St. Catharines	Rutland	105.220
James J. Patten	Barnes	Pursey	93.624
John Van Patten	Barnes	Warren	93.251
John Van Patten	Barnes	Warren	91.191
James J. Patten	St. Catharines	Rutland	87.798
John Van Patten	Warren	Warren	86.114
James J. Patten	Barnes	Groton	85.456
John Van Patten	Barnes	Warren	78.522

BROWN COUNTY.

One trip offered. Five boys entered. One boy finished as below:

Name	Postoffice	Township	Bushels
Herbert Waterman	Georgetown	Pleasant	76.1

BUTLER COUNTY.

Two trips offered. Two boys entered. Two boys finished, as below:

Name	Postoffice	Township	Bushels
George C. Raps	Hamilton, R. D. 1	Liberty	103.357
Elmer M. Kennel	Middletown	Lemon	84.67

CARROLL COUNTY.

No trips offered. Three boys entered. Two boys finished, as below:

Name	Postoffice	Township	Bushels
Fred Thompson	Oncida	Brown	82.343
Ralph Thompson	Oncida	Brown	65.928

CHAMPAIGN COUNTY.

One trip offered. Five boys entered. Two boys finished, as below:

Name	Postoffice	Township	Bushels
Elwood Ward	Urbana, R. D.	Mad River	100.822
Paul Stahler	Pemberton	Adams	92.66

CLARK COUNTY.

Two trips offered. Seven boys entered. One boy finished, as below:

Name	Postoffice	Township	Bushels
Forest T. Martin	Springfield, R. D. 5	Greene	105.228

CLERMONT COUNTY.

One trip offered. Eight boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Roy Jordon.....	Bethel.....	Tate.....	97.542—
Albert Kellum.....	Bethel, R. D. 1.....	Tate.....	69.862—
Roscoe Crain.....	Bethel.....	Tate.....	59.395—
Harry Kautz.....	Bethel.....	Tate.....	54.903—

CLINTON COUNTY.

Two trips offered. Nine boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Vernon Atley.....	Wilmington, R. D. 1.....	Liberty.....	81.616—
Howard Florea.....	Wilmington.....	Green.....	74.214—
Bari Atley.....	Wilmington, R. D. 1.....	Liberty.....	67.819—
Loren Greene.....	Sabina.....	Wayne.....	60.117—

COLUMBIANA COUNTY.

No trip offered. Two boys entered. Neither one finished.

COSHOCOTON COUNTY.

Two trips offered. Five boys entered. Five boys finished.

Name.	Postoffice.	Township.	Bushels.
Jay Lawrence.....	Coshocton.....	Millcreek.....	106.380
Foy Haines.....	Coshocton, R. D. 1.....	Bethlehem.....	100.237
Jesse Haxton.....	Coshocton, R. D. 1.....	Bethlehem.....	100.02
Byron Bowers.....	Coshocton.....	Bethlehem.....	88.621
Edmond Wolfe.....	Coshocton, R. D. 1.....	Keene.....	69.458

CRAWFORD COUNTY.

One trip offered. Eight boys entered. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Milton Diebler.....	Bucyrus, R. D. 4.....	Whetstone.....	78.105—
Roy Hieber.....	Bucyrus, R. D. 4.....	Liberty.....	60.303—
Paul Krauter.....	Bucyrus, R. D. 4.....	Liberty.....	44.214—

CUYAHOGA COUNTY.

One trip offered. Five boys entered. Two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Charles Weston.....	North Dover.....	Dover.....	101.823—
Alfred Vydoove.....	Gresham.....	Parma.....	54.71—

DARKE COUNTY.

Five trips offered. Twenty-two boys entered. Seventeen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Dewey Hanes.....	Arcanum.....	Twin.....	139.125
Geo. Klipstine.....	Bradford.....	Wayne.....	*101.764
Walter Blumenstock.....	Arcanum.....	Twin.....	101.
Leonard McLearn.....	Arcanum.....	Butler.....	96.819
Forrest M. Royer.....	Arcanum.....	Franklin.....	92.857
Galen B. Royer.....	Arcanum, R. D. 2.....	Franklin.....	91.928
Paul Warner.....	Greenville.....	Greenville.....	90.925
Roscoe Plessinger.....	Versailles.....	Richland.....	89.157
Walter Detling.....	Ansonia.....	Brown.....	88.304
Olon Riegel.....	Ansonia.....	Brown.....	87.488
Doniver Stutz.....	Arcanum, R. D. 3.....	Brown.....	84.959
Ernest Fisher.....	Ansonia.....	Brown.....	83.828
Eric Leaf.....	Ansonia.....	Brown.....	75.467
Harold Warvel.....	Ansonia, R. D. 2.....	Richland.....	73.371
Fred Strobel.....	Greenville.....	Greenville.....	65.77
Dewitt Hartle.....	Greenville, R. D. 10.....	Richland.....	64.486
Herman B. Shellabarger.....	New Weston.....	Wabash.....	62.472

DEFIANCE COUNTY.

Six trips offered. Twenty-seven boys entered. Thirteen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Ralph C. Smith.....	Bryan.....	Farmer.....	115.066
Bruce C. Kline.....	Hicksville.....	Hicksville.....	108.439
Alva Hagy.....	Defiance.....	Richland.....	107.464
Pursell Harper.....	Defiance, R. D. 3.....	Adams.....	100.949
Harold Gaylord.....	Defiance.....	Highland.....	96.571
Loren D. Carey.....	Hicksville.....	Milford.....	95.691
Ralph Richardson.....	Farmer.....	Farmer.....	89.968
J. Estell Beerbower.....	Bryan, R. D. 6.....	Farmer.....	85.061
Gerald A. Benedict.....	Defiance, R. D. 1.....	Tiffin.....	78.613
John Garman.....	Defiance, R. D. 1.....	Defiance.....	77.
Cleo R. Donnal.....	Hicksville.....	Hicksville.....	76.272
Chas. B. Kintner.....	Mark Centre.....	Mark.....	74.925
Ralph Karr.....	Defiance.....	Defiance.....	66.585

DELAWARE COUNTY.

One trip offered. Four boys entered. One boy finished as below:

Name.	Postoffice.	Township.	Bushels.
Ralph W. Humes.....	Delaware.....	Brown.....	99.3

ERIE COUNTY.

Three trips offered. Seven boys entered. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Homer Crecelius.....	Milan, R. D. 2.....	Oxford.....	123.642
James Fitz.....	Venice.....	Margaretta.....	113.162
Arthur Fitz.....	Venice.....	Margaretta.....	111.871

FAIRFIELD COUNTY.

No trip offered. One boy entered but did not finish.

*Corn was cut.

FAYETTE COUNTY.

Two trips offered. Sixteen boys entered. Seven boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Carl E. Miller.....	Jeffersonville.....	Jefferson.....	104.822—
Donald Zimmerman.....	Jeffersonville.....	Jefferson.....	101.583—
Marvin Williams.....	Jeffersonville.....	Jefferson.....	91.95—
Harry L. Heironimus.....	Jeffersonville.....	Jefferson.....	90.083—
Russell Bowers.....	Washington, C. H.....	Jefferson.....	70—
Ralph T. Roush.....	Washington C. H.....	Green.....	69.093—
Roscoe Bowers.....	Washington C. H., R. D. 4.....	Jefferson.....	63—

FRANKLIN COUNTY.

Two trips offered. Ten boys entered. Seven boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
James L. Mathias.....	Groveport.....	Madison.....	116.871
Clinton Stevenson.....	Canal Winchester.....	Madison.....	109.901
Edgar H. Will.....	Canal Winchester.....	Madison.....	109.717
Raymond Tobin.....	Canal Winchester.....	Truro.....	98.253
Joe Mathews.....	Columbus, Station A.....	Perry.....	81.045
Wm. E. Kinnaird.....	Galloway.....	Prairie.....	58.56
C. F. Christian.....	Camp Chase.....	Prairie.....	38.128

FULTON COUNTY.

Five trips offered. Thirty-seven boys entered. Twenty-three boys finished.

Name.	Postoffice.	Township.	Bushels.
Arthur V. Borton.....	Fayette.....	Chesterfield.....	122.295
Charles Short.....	Elmira.....	German.....	118.31
John Tabor.....	Delta.....	York.....	110.466
Kenneth D. Evers.....	Lyons.....	Royalton.....	105.962
Marion Lilley.....	Delta.....	York.....	102.941
Gordon T. Ross.....	Wauseon.....	York.....	102.493
Lawrence Perry.....	Wauseon.....	Clinton.....	101.852
Hal Stites.....	Wauseon.....	Chesterfield.....	98.546
J. G. Trudel.....	Wauseon.....	Clinton.....	98.313
Carl Lillick.....	Wauseon.....	Clinton.....	98.189
Whitney G. Sower.....	Wauseon.....	German.....	96.635
D. W. Howard McClarren.....	Delta.....	Pike.....	94.523
Harold Hendricks.....	Metamora.....	Amboy.....	91.892
Willard Leu.....	Archbold.....	German.....	90.883
Glade Stutesman.....	Wauseon.....	Chesterfield.....	90.346
Maurice I. Miller.....	Delta.....	York.....	88.42
R. R. Rychener.....	Pettisville.....	Clinton.....	85.746
Frank A. Wright.....	Delta, R. D. 24.....	Swan Creek.....	84.782
Chancy Wyse.....	Archbold.....	German.....	81.116
Harold Dowling.....	Swanton.....	Fulton.....	77.915
Earl Habel.....	Delta.....	Fulton.....	73.984
Clark Biddle.....	Swanton.....	Fulton.....	70.635
Ross L. Watkins.....	Delta.....	Fulton.....	67.075

GALLIA COUNTY.

One trip offered. Five boys entered. Two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Harlan K. Powell.....	Bidwell, R. D. 1.....	Springfield.....	100.33
Hobart C. Powell.....	Bidwell, R. D. 1.....	Springfield.....	104.514

GEAUGA COUNTY.

No trip offered. No entries.

GREENE COUNTY.

One trip offered. Twenty-nine boys entered. Ten boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
S. Morton Creswell.....	Cedarville, R. D. 1.....	Cedarville.....	108.39
William Rholer, Jr.....	Xenia, R. D. 2.....	Cedarville.....	92.55
Paul N. Creswell.....	Cedarville.....	Cedarville.....	89.52
Alfred Hutslar.....	Cedarville, R. D. 1.....	Cedarville.....	88.725
William W. Anderson.....	Xenia.....	New Jasper.....	87.328
Elbert St. John.....	Jamestown.....	New Jasper.....	85.5
Herman Lewis.....	Jamestown.....	Jefferson.....	78.722
Wilfred S. Weimer.....	Cedarville.....	Cedarville.....	76.142
Carle Bobb.....	Jamestown.....	Crescent.....	75.023
Paul Turnbull.....	Cedarville.....	Cedarville.....	67.05

GUERNSEY COUNTY.

Two trips offered. Four boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Dwight Nicholson.....	Byesville.....	Jackson.....	110.049
Lewis Hunter.....	Cumberland.....	Spencer.....	78.983
Paul J. Bell.....	Cambridge.....	Cambridge.....	77.562
Walter Sheperd.....	New Concord.....	Westland.....	76.699

HAMILTON COUNTY.

One trip offered. Ten boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Fred Iuen.....	Madisonville.....	Columbia.....	108.936
Nelson Hawk.....	Harrison, R. D. 1.....	Crosby.....	95.751
George Minges, Jr.....	Harrison, R. D. 1.....	Whitewater.....	95.660
Ross S. Watts.....	Harrison, R. D. 6.....	Whitewater.....	93.762

HANCOCK COUNTY.

Two trips offered. Ten boys entered. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Carrol Brundige.....	Bluffton.....	Union.....	96.017
Paul C. Myers.....	Rawson.....	Union.....	83.464
Ross Fullers.....	Rawson.....	Union.....	67.511

HARDIN COUNTY.

One trip offered. Eight boys entered. Four boys finished, as follows:

Name.	Postoffice.	Township.	Bushels.
James D. Spar.....	Kenton.....	Hale.....	93.45
Jennings Stambaugh.....	Ada.....	Liberty.....	85.617
Elwood S. LeVan.....	Mt. Victory.....	Hale.....	75.864
Lee White.....	Mt. Victory.....	Hale.....	64.205

HARRISON COUNTY.

No trip offered. One boy entered but did not finish.

HENRY COUNTY.

Five trips offered. Twelve boys entered. Nine boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Orlo E. Bishop.....	Hamler.....	Marion.....	121.379—
John Hefflinger.....	Napoleon.....	Harrison.....	113.071—
C. F. Wistinghausen.....	Napoleon.....	Flatrock.....	101.931—
Floyd Warner.....	Liberty Center.....	Liberty.....	95.005—
Howard R. Bollman.....	Liberty Center.....	Washington.....	92.401—
Harley Rutter.....	Deshler.....	Bartlow.....	84.87—
Z. H. Travis, Jr.....	Napoleon.....	Napoleon.....	84.325—
Horace A. Tanner.....	Napoleon.....	Napoleon.....	79.252—
John C. Stout.....	Liberty Center.....	Liberty.....	68.928—

HIGHLAND COUNTY.

One trip offered. (Restricted to vicinity of New Vienna). Five boys entered. Five boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
J. Edgar Williams.....	Hillsboro.....	Liberty.....	104.491—
Lloyd Hodson.....	New Vienna.....	Fairfield.....	88.228—
Jos. Blackburn.....	New Vienna.....	Penn.....	87.857—
Chas. Blackburn.....	New Vienna.....	Penn.....	83.83—
Donald Duckwall.....	Hillsboro.....	Liberty.....	52.05—

HOCKING COUNTY.

No trip offered. No entries.

HOLMES COUNTY.

No trip offered. Two boys entered. One boy finished.

Name.	Postoffice.	Township.	Bushels.
John Schlabbach.....	Millersburg.....	Berlin.....	

HURON COUNTY.

Three trips offered. Two boys entered. One boy finished, as below:

Name.	Postoffice.	Township.	Bushels.
Vaughn H. Watts.....	Havanna, R. D. 2.....	Fairfield.....	91.999

JEFFERSON COUNTY.

One trip offered. Two boys entered. Two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Howard Scott.....	Mt. Pleasant.....	Mt. Pleasant.....	90.944
Walter Scott.....	Creswell.....	Salem.....	78.837

KNOX COUNTY.

One trip offered. Twelve boys entered. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Forest W. Eley.....	Mt. Vernon, Box 233.....	Pleasant.....	114.314
Clyde W. Purdy.....	Mt. Vernon.....	Pleasant.....	95.858
Asa B. Remington.....	Brink Haven.....	Jefferson.....	*85.536

*Corn was cut.

LAKE COUNTY.

No trip offered. One boy entered, but did not finish.

LAWRENCE COUNTY.

One trip offered. Two boys entered. One boy finished, as below:

Name.	Postoffice.	Township.	Bushels.
Karl Gillette.....	Proctorville.....	Rome.....	89.205

LICKING COUNTY.

No trip offered. Two boys entered. One boy finished, as below:

Name.	Postoffice.	Township.	Bushels.
George O. Wilson.....	Newark.....	Newton.....	131.724—

LOGAN COUNTY.

Three trips offered. Forty boys entered. Thirteen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Clarence G. Hayes.....	Bellefontaine.....	Union.....	107.155—
Sam Armstrong.....	DeGraff.....	Miami.....	100.142—
Loren Williamson.....	Bellefontaine.....	Union.....	93.295—
Lester Fultz.....	Bellefontaine, R. D. 3.....	Union.....	86.025—
Daniel L. Steinberger.....	Bellefontaine.....	Lake.....	78.412—
Otto McGown.....	Lewistown.....	Stokes.....	76.893—
Harold Windham.....	Belle Center.....	Richland.....	76.154—
Porter Brugler.....	Bigsprings.....	Rush Creek.....	74.635—
Wallace Ewing.....	Belle Center.....	Richland.....	74.507—
Marion Inskcep.....	East Liberty.....	Perry.....	68.747—
Kenneth Cost.....	Quincy.....	Miami.....	61.241—
McKinley Braden.....	Bellefontaine.....	Harrison.....	59.757—
Raymond Braden.....	Bellefontaine.....	Harrison.....	59.303—

LORAIN COUNTY.

Two trips offered. Forty-eight boys entered. Six boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Carl Dellefield.....	Lorain.....	Elyria.....	86.178
Chester Nash.....	Oberlin.....	Burnside.....	71.764
Edw. Eckbower.....	Oberlin, R. D. 2.....	Oberlin.....	71.032
Wendel Unger.....	Kipton.....	Henrietta.....	69.27
Mervin Schubert.....	Oberlin, R. D. 2.....	Russia.....	59.866
Vincent Dieterick.....	North Ridgeville.....	Ridgeville.....	54.542

LUCAS COUNTY.

Four trips offered. Twenty-five boys entered. Ten boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
M. C. Demuth.....	Whitehouse.....	Providence.....	107.288
Lawrence Kelsey.....	Swanton.....	Swanton.....	102.025
Geo. Degenfelder.....	Swanton.....	Spencer.....	96.203
Roy Graf.....	Waterville.....	Providence.....	86.953
Freeman Blystone.....	Berkey, R. D.	Richfield.....	85.785
Jos. Stein.....	Swanton.....	Spencer.....	80.025
Herbert Hutchinson.....	Whitehouse.....	Providence.....	79.003
Fred Grossheim.....	Monclova.....	Monclova.....	68.876
Lawrence Wicks.....	Monclova.....	Monclova.....	62.143
John Zwyer.....	Monclova.....	Monclova.....	41.183

BOYS' CORN CONTEST.

865

MADISON COUNTY.

Four trips offered. Four boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Edw. Fitzgerald.....	Lilley Chapel.....	Jefferson.....	88.706
Richard Bradfield.....	Lilley Chapel.....	Fairfield.....	84.905
Manford Smith.....	Lilley Chapel.....	Fairfield.....	82.11
Howard F. Dorn.....	London, R. D. 3.....	West Range.....	80.732

MAHONING COUNTY.

One trip offered. One boy entered, but did not finish.

MARION COUNTY.

One trip offered. Three boys entered. One boy finished, as below:

Name.	Postoffice.	Township.	Bushels.
William H. Raub.....	LaRue.....	Bowling Green.....	105.282

MEDINA COUNTY.

One trip offered. Three boys entered. Two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
A. H. Gallatin.....	Spencer.....	Spencer.....	95.435
E. S. Gault.....	Chippewa Lake.....	Lafayette.....	94.661

MEIGS COUNTY.

One trip offered. Seven boys entered. Three boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Byron Bingham.....	Rutland.....	Rutland.....	119.242
O. T. Hecox.....	Sumner.....	Orange.....	78.548
Mark Cowen.....	Pratt's Fork.....	Bedford.....	74.633

MERCER COUNTY.

Eight trips offered. Sixty-one boys entered. Nineteen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Chauncey R. Smith.....	Rockford.....	Dublin.....	116.978
Thomas Ritchie.....	Montezuma.....	Franklin.....	101.691
Ed. H. Eichenauer.....	Celina.....	Hopewell.....	99.644
Byron Lemunyon.....	Celina, R. D. 8.....	Center.....	94.772
Harold Eichenauer.....	Celina.....	Hopewell.....	92.698
Vernon Counterman.....	Rockford.....	Black Creek.....	90.143
Vermont Young.....	Rockford.....	Center.....	84.472
Orville Brookhart.....	Mendon.....	Union.....	87.135
Carl Andrews.....	Celina.....	Jefferson.....	85.485
W. S. Miller.....	Celina.....	Jefferson.....	78.874
Hugo Weinman.....	Rockford.....	Liberty.....	78.454
Leo Pax.....	Celina.....	Jefferson.....	71.409
Travers Wolf.....	Celina.....	Jefferson.....	70.75
Theodore Weinman.....	Rockford.....	Liberty.....	70.16
D. L. Purdy.....	Rockford.....	Black Creek.....	68.568
Dee Grim.....	Mendon.....	Union.....	67.836
Dolan Loree.....	Rockford.....	Liberty.....	67.01
Rayman A. Wolfe.....	Celina.....	Jefferson.....	61.821
Bryan Davis.....	Celina.....	Jefferson.....	58.011

MIAMI COUNTY.

Two trips offered. Nine boys entered. Two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Adam Wilgus.....	Casstown.....	Lost Creek.....	96.115
Rubie C. Meeks.....	Casstown, R. D. 1.....	Lost Creek.....	77.285

MONROE COUNTY.

No trip offered. Three boys entered, but none of them finished.

MONTGOMERY COUNTY.

Three trips offered. Twenty-one boys entered. Seven boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Lawrence Kauffman.....	Dayton, R. D. 7.....	Van Buren.....	109.386
Russell H. Young.....	Dayton, R. D.....	Van Buren.....	92.263
Herbert R. John.....	Dayton, R. D. 12.....	Van Buren.....	89.049
Ralph W. Wells.....	Tadmire, R. D. 1.....	Butler.....	84.928
J. Rowland Wells.....	Tadmire, R. D. 1.....	Butler.....	83.428
Perle Whitehead.....	Germantown.....	German.....	80.942
Ralph Whitehead.....	Germantown.....	German.....	78.528

MORGAN COUNTY.

Two trips offered. Eight boys entered. Five boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Forest Parmiter.....	McConnellsville.....	Meigsville.....	121.405
Samuel A. Porter.....	Malta.....	Malta.....	92.567
Frank E. Boarden.....	Malta, R. D. 3.....	Deerfield.....	88.521
Jos. E. Andersen.....	Malta, R. D. 3.....	Deerfield.....	83.704
Russell Chadwick.....	Roxbury.....	Windsor.....	35.943

MORROW COUNTY.

Two trips offered. Thirteen boys entered. Five boys finished, as below. The two highest boys' lots were not according to rules and were ruled out.

Name.	Postoffice.	Township.	Bushels.
Fred Jones.....	Cardington.....	Lincoln.....	130.65
Perry Levering.....	Fredericktown.....	Chester.....	101.22
Fred J. Brown.....	Mt. Gilead.....	Harmony.....	99.277
Ralph Mellott.....	Mt. Gilead.....	Franklin.....	83.979
Robert McClarren.....	Galion.....	Washington.....	75.473

MUSKINGUM COUNTY.

One trip offered. Seven boys entered. Five boys finished, as below:

Name.	Post office.	Township.	Bushels.
Frank L. White.....	Chandlersville.....	Rich Hill.....	111.9
Ralph Robinson.....	Dresden.....	Cass.....	99.777
Ural S. Elliott.....	New Concord.....	Rich Hill.....	89.585
Ralph W. Shepherd.....	Norwich.....	Union.....	88.014
Lyle Brookover.....	Zanesville, R. D. 7.....	Wayne.....	57.7

BOYS' CORN CONTEST.

867

NOBLE COUNTY.

No trip offered. Four boys entered, but did not finish.

OTTAWA COUNTY.

Three trips offered. Eleven boys entered. Six boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Orvill House.....	Genoa.....	Clay.....	129.812
George G. Powers.....	Genoa.....	Clay.....	88.76
James W. Frazier.....	Curtice.....	Allen.....	80.825
Harry M. Veh.....	Oak Harbor.....	Salem.....	74.935
George Hallier.....	Oak Harbor.....	Salem.....	*57.028
Elmer Goodman.....	Oak Harbor.....	Salem.....	44.931

PAULDING COUNTY.

Eight trips offered. Forty boys entered. Twenty boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Trenton O. Price.....	Payne.....	Benton.....	100.596
George Gusler.....	Haviland.....	Latty.....	97.965
Cecil Stewart.....	Cecil.....	Crane.....	95.352
Paul Gusler.....	Haviland.....	Latty.....	94.598
W. W. Matson.....	Continental.....	Brown.....	93.972
William Goyings.....	Paulding.....	Paulding.....	93.433
Roy Hornish.....	Oakwood.....	Brown.....	91.968
Lealie Huff.....	Haviland.....	Blue Creek.....	87.58
Albert D. Johnson.....	Paulding.....	Paulding.....	81.542
Cecil Stebelton.....	Paulding, R. D.....	Crane.....	81.542
Ernel Walley.....	Paulding, R. 1. 1.....	Jackson.....	80.416
Emette Troyer.....	Paulding.....	Jackson.....	78.224
Byron Hartzell.....	Haviland.....	Latty.....	77.285
R. M. Huff.....	Haviland.....	Blue Creek.....	75.589
Harry Johnson.....	Paulding.....	Jackson.....	71.431
Oscar Matson.....	Oakwood.....	Brown.....	68.285
Arthur McClure.....	Grover Hill.....	Latty.....	64.314
Chas. S. Shialer.....	Oakwood.....	Brown.....	60.428
Don Hartzell.....	Haviland.....	Blue Creek.....	51.357
S. Guy Campbell.....	Oakwood.....	Washington.....	50.683

PERRY COUNTY.

No trip offered. One boy entered and stayed in to the finish and his trip was paid by Guernsey County people.

Name.	Postoffice.	Township.	Bushels.
Albert Helser.....	Thornville.....	Thorn.....	92.633

PICKAWAY COUNTY.

No trip offered. No entries.

PIKE COUNTY.

No trip offered. Thirteen boys entered. One boy finished.

Name.	Postoffice.	Township.	Bushels.
Walter G. Lochbaum.....	Waverly.....	Seal.....	98.00

*Corn was cut.

PORTAGE COUNTY.

One trip offered. Nine boys entered. Six boys finished as below:

Name.	Postoffice.	Township.	Bushels.
Lee Ferry.....	Kent.....	Brimfield.....	123.243
Lucius F. Converse.....	Mantua.....	Mantua.....	88.923
Guy Shefelton.....	Deerfield.....	Deerfield.....	81.142
Thos. O. Griffith.....	Lloyd.....	Palmyra.....	78.069
Ransom Hopkins.....	Garrettsville.....	Nelson.....	74.81
Earl E. McNulty.....	Rootstown.....	Rootstown.....	69.781

PREBLE COUNTY.

Three trips offered. Nine boys entered. Six boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Stanley Buriff.....	Eaton.....	Washington.....	110.453
Harvey Douglas.....	Camden.....	Somers.....	105.414
L. F. Rodeffer.....	Eaton.....	Washington.....	103.965
Everett C. Geeding.....	Campbellstown.....	Jackson.....	99.00
Paul Fudge.....	Eaton.....	Washington.....	98.163
Harry Aydelotte.....	Campbellstown.....	Jackson.....	91.052

PUTNAM COUNTY.

Fourteen trips offered. Seventy-six boys entered. Forty-two boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Orville Hoffman.....	Miller City.....	Palmer.....	114.991
Merl E. Miller.....	Ottawa.....	Blanchard.....	108.693
Howard Hoffman.....	Miller City.....	Palmer.....	107.695
Harvey E. Weber.....	Pandora.....	Riley.....	101.082
Alexander Portman.....	Kalida.....	Union.....	100.73
Munson R. Bixel.....	Pandora.....	Riley.....	100.05
Hayden Basinger.....	Pandora.....	Riley.....	99.249
Peter N. Suter.....	Pandora.....	Riley.....	97.9
Alvah Ellerbrook.....	Cloverdale.....	Perry.....	97.331
Walter Schutz.....	Pandora.....	Riley.....	95.55
Lair Vandemark.....	Columbus Grove.....	Union.....	92.865
Oliver Schumacher.....	Pandora.....	Riley.....	92.788
Leo Unverferth.....	Pt. Jennings.....	Union.....	91.596
Oscar Krouse.....	Pt. Jennings.....	Sugar Creek.....	90.378
Lawrence Roger.....	Leipsic.....	Blanchard.....	90.166
Lawrence Unverferth.....	Pt. Jennings.....	Union.....	88.276
Freeman Samsel.....	Columbus Grove.....	Sugar Creek.....	87.841
Guy E. Harris.....	Columbus Grove.....	Sugar Creek.....	87.19
Edward Rooney.....	Columbus Grove.....	Pleasant.....	87.117
Ralph Billingsley.....	Leipsic.....	Blanchard.....	85.742
Glen Hall.....	Ottawa.....	Blanchard.....	85.676
Gordon S. Skinner.....	Pt. Jennings.....	Union.....	85.266
Guy A. Hummon.....	Leipsic.....	Van Buren.....	85.162
Roland C. Mack.....	Leipsic.....	Liberty.....	84.681
Alva J. Vandemark.....	Columbus Grove.....	Sugar Creek.....	84.058
Otis Van Sickle.....	Leipsic.....	Van Buren.....	82.103
George Gores, Jr.....	Leipsic.....	Liberty.....	82.081
D. Ross Henry.....	Leipsic.....	Van Buren.....	81.925
Lewis Krouse.....	Pt. Jennings.....	Union.....	81.633
Floyd J. Doll.....	Leipsic.....	Blanchard.....	81.373
Floyd Doll.....	Leipsic.....	Blanchard.....	80.601
Lewis Tegardner.....	Columbus Grove.....	Sugar Creek.....	79.727
Leonard J. McDowell.....	Pandora.....	Riley.....	78.549
Opel C. Stemen.....	Columbus Grove.....	Pleasant.....	77.833
Russell Rimer.....	Vaughnsville.....	Sugar Creek.....	76.491
Paul G. Oren.....	Gilboa.....	Blanchard.....	75.45
Alfred G. Goedde.....	Columbus Grove.....	Union.....	74.21
Joseph Rode.....	Leipsic, R. D. 3.....	Jennings.....	72.111
Earl T. Jones.....	Continental.....	Monroe.....	*70.581
Henry Rode, Jr.....	Delphos, R. D. 3.....	Jennings.....	69.672
Wayne Saunders.....	Columbus Grove, R. D. 5.....	Pleasant.....	68.35
Thos. G. Foulkes.....	Columbus Grove.....	Union.....	59.851

*Corn was cut.

RICHLAND COUNTY.

No trip offered. One boy entered but did not finish.

ROSS COUNTY.

No trip offered. Five boys entered but none of them finished.

SCIOTO COUNTY.

No trip offered. One boy entered but did not finish.

SANDUSKY COUNTY.

One trip offered. Ten boys entered. Seven boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
George Kappauf	Bellevue	York	104.241
Harold T. Miller	Clyde	Green Creek	98.414
Carl Vickery	Bellevue	York	94.443
Mark Zeigler	Fremont, R. D. 2	Ballville	84.847
Ray R. Haven	Fremont	Jackson	83.517
George P. Winters	Burgoon	Jackson	73.258
Clarence Nuhfer	Woodville	Woodville	64.621

SENECA COUNTY.

One trip offered but withdrawn on account of only one entry, but he staid in to the finish.

Name.	Postoffice.	Township.	Bushels.
J. W. Seigley	Tiffin, R. D. 5	Clinton	95.41

SHELBY COUNTY.

Twelve trips offered. Fifty boys entered. Twenty-eight boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Lawrence C. Hussey	Port Jefferson	Salem	130.56
Foster Caven	Conover	Green	102.078
Clay Caven	Conover	Green	101.637
Jos. Stockstill	Sidney, R. D. 3	Orange	100.168
Foster H. Wilson	Sidney, R. D. 1	Green	98.38
Wesley Thompson	Sidney	Orange	96.199
Homer Russell	Sidney	Clinton	91.338
Orley Blalock	Sidney	Perry	91.744
Noel Yinger	Sidney	Turtle Creek	90.474
Fred Key	Sidney	Perry	85.243
Otis Key	Sidney	Perry	84.808
Mabley W. Barger	Sidney, R. D. 8	Turtle Creek	84.7
Lowell Morrow	Piqua	Washington	84.05
William Millhouse	Sidney, R. D. 1	Orange	83.475
D. J. Thompson, Jr.	Piqua	Washington	82.947
Oliver L. Smith	Jackson Center	Jackson	81.714
Harvey Hoewisher	Sidney	Franklin	80.797
Clarence O. Apple	Covington	Laromie	80.674
Roy Van Dine	Sidney, R. D. 9	Orange	80.522
Emerson R. Apple	Covington	Laromie	79.657
Avery Knasel	Anna, R. D. 1	Franklin	75.95
Ray Brush	Houston	Laromie	76.337
John H. Wick	Houston	Laromie	75.782
Clifford Knoop	Sidney	Salem	75.515
Raymond E. Springer	Sidney	Clinton	72.683
Floyd A. McClure	Sidney	Perry	69.566
Ralph Voress	Sidney	Orange	67.134
Ralph W. Knoop	Sidney	Salem	71.664

STARK COUNTY

One trip offered. Three boys entered but none of them finished.

SUMMIT COUNTY.

Three trips offered. Ten boys entered. Five boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Wade Hoff.....	Hudson.....	Twinsburg.....	*97.
William Cook.....	Twinsburg.....	Twinsburg.....	*8.451—
James Clark.....	Twinsburg.....	Twinsburg.....	77.302
Stanley S. Rothrock.....	Pairlawn.....	Portage.....	74.308
Theo. Scott.....	Tallmadge.....	Tallmadge.....	52.966

TRUMBULL COUNTY.

One trip offered. Fifteen boys entered. Four boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Harry J. Simon.....	Warren.....	Lordstown.....	113.474—
Vergil Jacoby.....	Courtland.....	Mecca.....	97.339
Leslie E. Bone.....	Newton Falls.....	Braceville.....	88.62
Harry Bard.....	Girard, R. D. 1.....	Liberty.....	46.108

TUSCARAWAS COUNTY.

No trip offered. Two boys entered. One boy finished as below.

Name.	Postoffice.	Township.	Bushels.
Charles Penix.....	Canal Dover.....	Franklin.....	98.485—

UNION COUNTY.

No trip offered. No entries.

VAN WERT COUNTY.

Ten trips offered. Eighty-four boys entered. Forty-one boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Edwin Swick.....	Van Wert.....	Ridge.....	93.5
Clarence Mox.....	Delphos.....	Washington.....	90.668
Wm. E. Muntzinger.....	Convoy.....	Harrison.....	89.302
DeWitt Carey.....	Convoy.....	Union.....	87.047
Wm. H. Jones.....	Venedocia.....	York.....	86.514
Albert High.....	Ohio City.....	Liberty.....	86.509
Earl Leathers.....	Van Wert.....	Ridge.....	85.292
Lyman Owens.....	Convoy.....	Harrison.....	85.2
Carey LaRue.....	Van Wert.....	Harrison.....	84.547
Robert H. Neate.....	Ohio City.....	Liberty.....	84.022
Elyhue Underwood.....	Van Wert.....	Union.....	83.96
Chas. S. Schaberg.....	Convoy.....	Tully.....	83.866
Bruce Rumble.....	Scott.....	Hoaglin.....	83.545
Oscar Allen.....	Van Wert.....	Ridge.....	82.812
Walter Jones.....	Delphos.....	Washington.....	82.234
Floyd R. Baxter.....	Convoy.....	Tully.....	80.407
Elvin Rager.....	Van Wert.....	Goaglin.....	79.939
Lester Hattery.....	Van Wert.....	Hoaglin.....	78.657
Asa Spray.....	Van Wert, R. D. 6.....	Liberty.....	78.304
Ray Baer.....	Middlepoint, R. D. 1.....	Hoaglin.....	78.291
Ellis Dupre.....	Van Wert.....	Pleasant.....	76.728
Orlo Kochler.....	Van Wert.....	Liberty.....	75.933
C. A. Springer.....	Convoy.....	Harrison.....	75.865
Glen Lewis.....	Middlepoint.....	Washington.....	73.763
Mark Temple.....	Convoy.....	Tully.....	73.514

*Corn was cut.

VAN WERT COUNTY—Concluded.

Name.	Postoffice.	Township.	Bushels.
Thurman Thompson.....	Convoy, R. D. 1.....	Union.....	73.487
Chancy Croghan.....	Van Wert.....	Liberty.....	72.577
Reuben Dowler.....	Van Wert.....	Union.....	69.528
Russell Miller.....	Middlepoint.....	Jackson.....	68.676
Morris Ferguson.....	Van Wert.....	Union.....	67.004
Milo Thayer.....	Van Wert.....	Union.....	63.57
Thos. Roberts.....	Venedocia.....	York.....	63.411
Jno. Snyder.....	Dixon, R. D. 2.....	Tully.....	61.271
Ralph Wolfe.....	Van Wert.....	Union.....	61.147
Stanley Roberts.....	Venedocia.....	York.....	59.706
Archie F. Alspach.....	Convoy.....	Union.....	59.157
Luther Leathers.....	Van Wert.....	Ridge.....	58.7
Edward Lauer.....	Spencerville.....	Jennings.....	57.982
Epsy Rogers.....	Scott.....	Union.....	53.764
Paul Evans.....	Van Wert.....	Ridge.....	50.089
Curtis Evans.....	Van Wert.....	Ridge.....	45.535

VINTON COUNTY.

No trip offered. Two boys entered. One boy finished as below.

Name.	Postoffice.	Township.	Bushels.
Elmer J. Fitzpatrick.....	Radcliffe.....	Vinton.....	103.01

WARREN COUNTY.

Four trips offered. Thirty-two boys entered. Nine boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Louis Verbryke.....	Lebanon, R. D. 3.....	Turtle Creek.....	111.551—
Hobart Marsh.....	Waynesville, R. D. 4.....	Wayne.....	110.8—
Carl B. Frye.....	Waynesville.....	Wayne.....	100.787—
Matthias Drake.....	Lebanon.....	Turtle Creek.....	93.191—
Ericson Poling.....	Oregonia.....	Turtle Creek.....	92.512—
Burdette Whitacre.....	Blanchester.....	Harlan.....	80.089—
Lewis Bevan, Jr.....	Clarksville.....	Washington.....	79.257—
Ralph Snook.....	So. Lebanon.....	Union.....	71.7—
Emmer Monger.....	Lebanon.....	Clear Creek.....	54.793—

WASHINGTON COUNTY.

One trip offered. Five boys entered. Two boys finished as below.

Name.	Postoffice.	Township.	Bushels.
Carl Mackey.....	Reno.....	Marietta.....	93.814—
C. Errol Holdren.....	Little Hocking.....	Belpre.....	87.14—

WAYNE COUNTY.

No trip offered. Two boys entered. One boy finished as below. He was given a free trip by money raised by popular subscription.

Name.	Postoffice.	Township.	Bushels.
Forest R. Stahl.....	Wooster.....	East Union.....	103.62—

WILLIAMS COUNTY.

Seven trips offered. Twenty-six boys entered. Seventeen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Jacob W. Rupp	Archbold	Springfield	133.689
Fay E. Lees	Edon	Florence	109.494
H. P. Oberlin	Bryan	Jefferson	107.623
L. Paul Castor	Bryan	Pulaski	106.666
Elvin Mann	West Unity	Jefferson	103.068
Glen Detwiler	West Unity	Mill Creek	102.371
Hubert Hayes	West Unity	Brady	98.251
C. N. Daniels	West Unity	Brady	98.25
Calvin Kaiser	Alvordton	Mill Creek	95.82
Robert J. Robinson	Stryker	Springfield	94.813
Albert Zulch	Montpelier	Florence	91.65
Dale Brenner	Bryan	Pulaski	85.26
Asa C. Clark	Stryker	Springfield	85.075
Nathan A. McConeghy	Bryan	Pulaski	75.928
Kenneth Martin	West Unity	Jefferson	74.057
Adrian Lindsey	Bryan	Jefferson	73.571
Harry Schall	Montpelier	Superior	60.573

WOOD COUNTY.

Ten trips offered. Fifty-seven boys entered. Twenty-nine boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Howard Waugh	Bowling Green	Webster	106.872
Roy Huffman	Grand Rapids	Grand Rapids	106.63
Harry Van Wagner	Tontogany	Washington	104.392
Harry S. Felton	Bloomdale	Perry	95.79
LeRoy McWilliams	Weston	Grand Rapids	92.802
Allen H. Jimison	Pemberville	Center	90.492
Fred Smith	Bloomdale	Bloom.	89.78
Reed B. Dunn	Deshler	Jackson	88.899
Arnold Krukemyer	Pemberville	Freedom	87.932
C. A. Petteys	Grand Rapids	Grand Rapids	87.161
Murel Baker	Grand Rapids	Grand Rapids	86.246
George F. Dunn, Jr.	Deshler	Jackson	83.695
Harvey Brim	Bowling Green	Plain	82.244
Homer Wade	Grand Rapids	Washington	81.828
George P. Wilford	Bowling Green	Center	81.666
William Lowe	Bowling Green	Plain	80.576
Lester Loomis	Scotch Ridge	Webster	79.508
Andrew C. Johnson	Bowling Green	Plain	79.5
Clifford Philo	Dunbridge	Webster	79.091
Royal Chamberlain	Bowling Green	Plain	79.
Clyde Canfield	Pemberville	Freedom	78.285
Fred Brothorst	Lucky	Troy	76.108
Zandy Avery	Bowling Green	Plain	71.946
Dewitt Simon	Bloomdale	Bloom.	70.698
Ralph Christian	Lucky	Troy	69.57
Ruel Raney	Bowling Green	Center	68.508
Elmer Wenig	Tontogany	Washington	68.378
Harold A. Johnson	Bowling Green	Plain	67.433
Chas. Hourie	Lucky	Troy	67.289

WYANDOT COUNTY.

Four trips offered. Thirty-five boys entered. Thirteen boys finished, as below:

Name.	Postoffice.	Township.	Bushels.
Albert D. Opp	Forest	Richland	110.157
L. Paul Curllis	Sycamore	Sycamore	91.997
Raymond Creger	Harpster	Antrim	89.477
Vernon McBeth	Harpster	Antrim	87.109
Robert E. Swihart	Harpster	Antrim	79.089
Emery Yoke	Carey	Crawford	78.02
Virgil Yoke	Carey	Crawford	76.431
Geo. H. Karr	Carey	Crawford	71.928
Ervin Wonder	Carey	Crawford	62.528
L. Roy Schoenberger	Upper Sandusky	Pden	62.101
Jesse Granlee	Harpster	Marseilles	59.075
Clyde Granlee	Harpster	Marseilles	53.1
Horace Chandler	Upper Sandusky	Marseilles	50.133

*Editorial—March Bulletin.***A Reminder**

God never votes for a "Tight-wad." A stingy man is a misfit, even in a savings society. He who can, but won't supply his wife and home with comforts and conveniences, will need asbestos clothes after death.

The wife, enslaved in drudgery while her husband is making money to put in the bank, ought to tell the truth to the tax assessor. This would make him reform or ask for divorce. Either proceeding would make the woman happy.

The man who makes home merely a place to eat, sleep and wash, will, after while, lose the power to love and the joy of living. He will dread to hear the patter of little feet, and the music of childish laughter. Life becomes a "grind," and his company miserable.

Sweetheart, wife and mother. A beautiful Trinity, that ought to make men resolve to higher levels rise. To win her, men will do and dare and accomplish things worth while.

Too oft, when the honeymoon has waned, the promises made, when wooing and pursuing are forgotten, the Golden Calf begins to fatten on work and worry. Mother's song is not as sweet and frequent as it used to be. The bloom in her cheek is fading, and ere the busy husband is aware, the happy bride of other days is standing at the threshold of age.

Among the common-folk of far-off India, there is a legend, that since God cannot be everywhere, all the time, he selects good wives and mothers to take his place in his absence. A better choice could not be made.

Inside the walls of home, happiness and good cheer should prevail. For the sake of a bank account the wife should never be neglected. Men should drive business rather than have business drive them. Husband should have time to lift some of the burdens borne by the faithful, uncomplaining wife.

The husband who will give ten minutes serious thought to these matters will do something very soon to make wife happier and home brighter. God never votes for a "tight-wad."

A. P. SANDLES,
Secretary.

*Editorial—July Bulletin.***Farm
Politics**

A politician may be either a blessing or a pestilence.
Bad politics is adultery of public duty with private gain.

Bad politics is greed, grab, graft, and the use and abuse of political power as a personal money-mill.

Bad politics is failure of the citizen to vote, or worse still, to ask for pay for voting.

Bad politics is trying to get office by defaming character; by campaign lying and buying votes; by cheat and deceit; by trick and trade; by pretense false and foolish.

Good politics is voting in the forenoon, and knowing for what purpose the vote is cast.

Good politics is making public officials do something good for the people as well as for themselves.

Good politics is knowing how to conduct the business of a town, township, county, state or nation.

Good politics is the administration of public affairs in the interest of peace, prosperity and general welfare.

Farmers make bad wages neglecting decent politics.

Two thousand farmers were asked the question: "Do farmers take as much interest in public questions and elections as do the voters in towns and cities?"

A majority confessed that they did not. Rural folks should be as public spirited as those who dwell in town and city.

Crop yields should be increased and breeds improved. It is also important that the welfare of the state be maintained and not permitted to decline.

The farmer will soon have the privilege to approve or disapprove the work of the Constitutional Convention. He should not shirk the task. The special September election will be the most important in twenty years. Votes will be for principles and not for men. Forty-two Proposals are submitted. Upon each he should express his judgment by voting "Yes" or "No." Unless he votes intelligently he may do violence to his country and to himself. Not to vote will count against his credit.

THE BALLOT

"Is a weapon that comes down as still,
As snow flakes fall upon the sod;
But it executes a free man's will,
As lightning does the will of God."

A. P. SANDLES,
Secretary.

*Editorial—August Bulletin.***Farm
Politics**

Henry Ward Beecher, the Preacher, once said, "A Flower is the most beautiful thing God ever made into which he forgot to put a soul."

A Flower is a Preachment and a Sermon. Gaze at it for one minute and you are convinced that somewhere there is some great power that made it come up out of the dirt and be beautiful to behold.

The black clod, the sunbeam, the seed and the rain are not all. Its brilliant color and its scented fragrance were given by a hand Divine. There is no better name for Divine Providence than just to call it "God."

The Ohio Department of Agriculture is trying to induce city, town and country people to grow more flowers, plants, shrubbery and trees and thereby adorn and beautify their homes, church yards, school yards and roadsides.

Every citizen should join and help this flower movement. It will make homes more cheerful, mothers happier, fathers braver, the world better, the old younger, the bad better, and little children glad and more respectful.

The Ohio State Fair grounds have been beautified by many flower beds, shrubs, plants and trees for the purpose of inducing State Fair visitors to become the friends and growers of flowers and promoters of civic beauty.

The Fair is clean and moral. It would prove a good investment to have young people visit this big Exposition and become familiar with its many lessons for good. The impressions and inspirations of the State Fair are worth having.

A. P. SANDLES,
Secretary.

Editorial—December Bulletin.

Raising the Average

Raising the average is better than breaking records. Agricultural education is good, but agricultural inspiration is just as good. Falling in love with the farm is better than getting a divorce from it. The right kind of farming beats holding office. The rush toward a White Shirt Job is not as profitable as one hundred bushels of corn per acre.

Ohio has yet to learn the beauties and glories of one acre of dirt. The boys are discovering how to farm while some of their fathers still believe the world is flat. War on low average has been declared.

The Boys' Corn Growing Contest of 1912 was farming to beat the old folks. Public spirited business men guaranteed the expenses of two hundred boy winners to Washington, D. C.

The indifference of some farmers toward their own offspring is more than twelve inches thick. It was an easy matter to get the man in town to put up the money for the trip. It was hard work to get the farmer to put up the boy. Over one thousand boys entered the contest. Hail, floods, sickness and fathers compelled many to drop out. Five hundred and ten finished. Ninety-three got more than one hundred bushels on their acre. Dewey Hanes, Darke County, won the honors, 139 bushels. The average of the 510 boys was 85 bushels. Men's average in Ohio is 35. The boys represent all parts of Ohio. Good drainage, alfalfa, seed testing, deep plowing, early planting and frequent cultivation all won victories in this great Corn War.

The boys are glad they were in the fight. They are much better farmers today than they were this time last year. They tried to learn how to farm instead of trying to learn how to get off the farm. This is victory. The boys will revise the farming business upward, while some of their fathers have been revising it downward. Average age of the 510 boys, 16. Increase of boys' average over men's average, 50 bushels. Remarkable. Applause. Raise the Average is the slogan.

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